I ♥ ORIGAMI おりがみはうす ガレージブックシリーズ 19



勝田恭平折り紙作品集 2
Origami Works of Kyohei Katsuta 2

勝田恭平 著　山口 真 編　立石浩一 訳

Model Design & Diagrams by Kyohei Katsuta

Editor : Makoto Yamaguchi　Translator : Koichi Tateishi

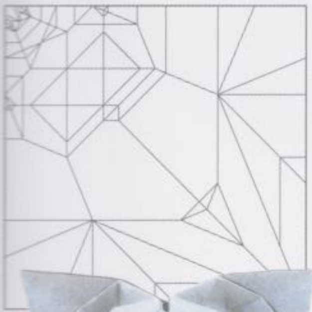
おりがみはうす

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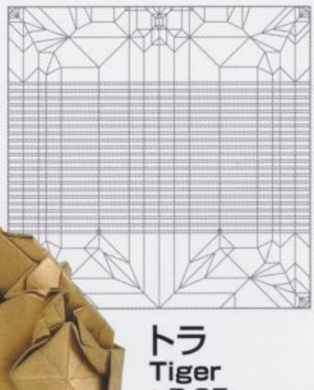
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ペルシャ猫
Persian Cat
▸P.20

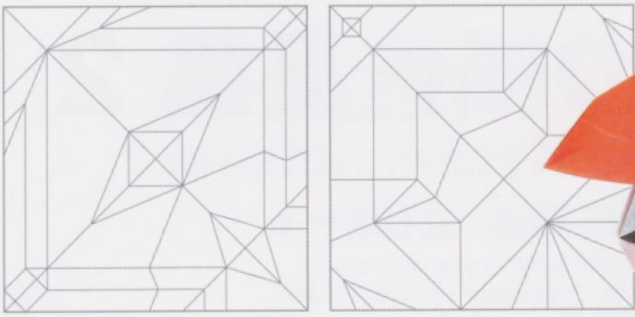



エゾモモンガ 2
Siberian Flying Squirrel 2
▸P.10



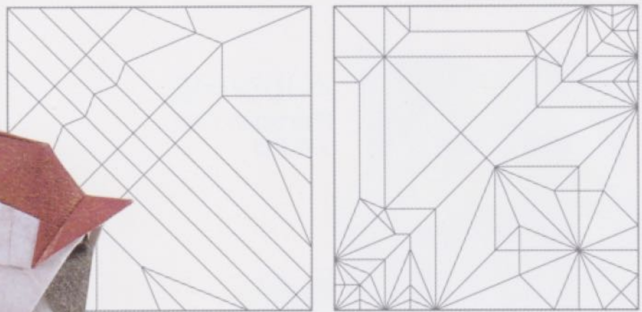

トラ
Tiger
▸P.35

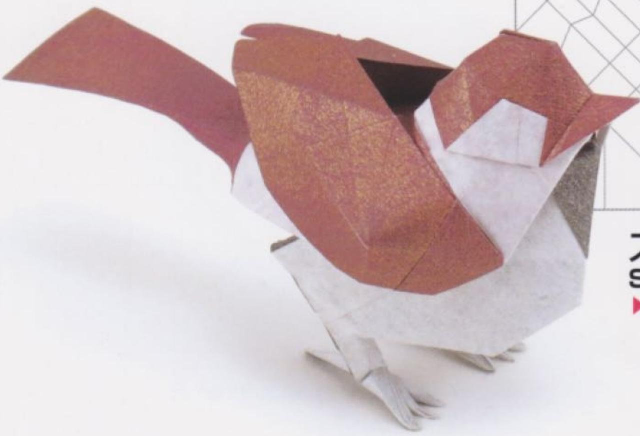
おりがみはうす



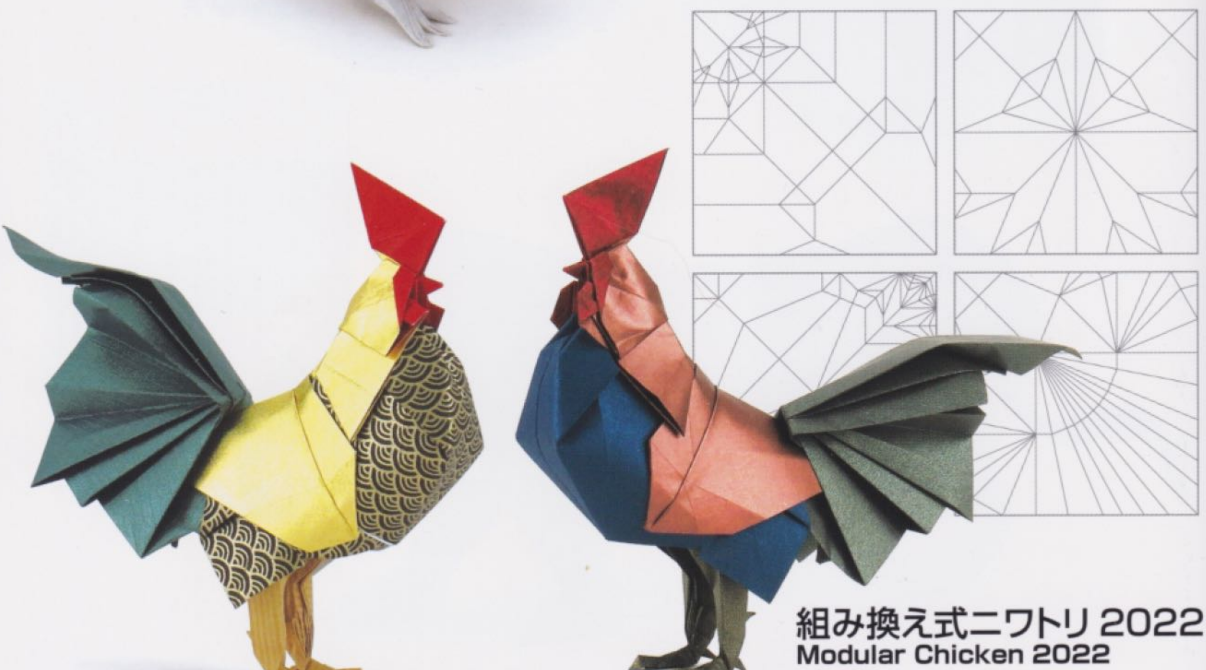


ツノメドリ
Horned Puffin
▶P.55

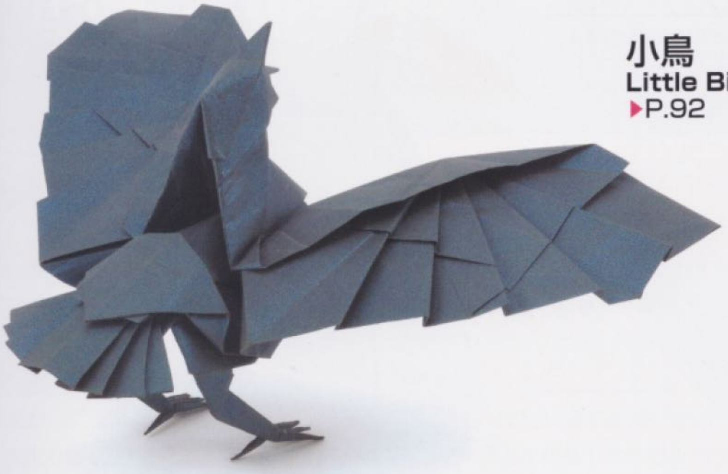




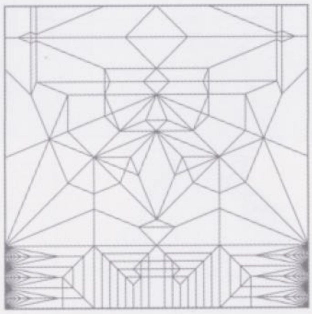
スズメ
Sparrow
▶P.64

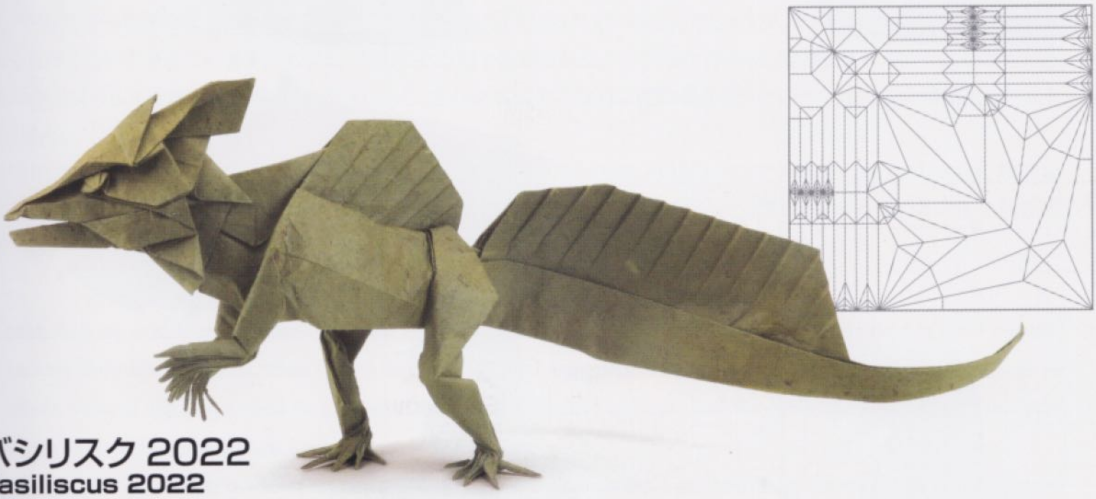


組み換え式ニワトリ 2022
Modular Chicken 2022
▶P.77

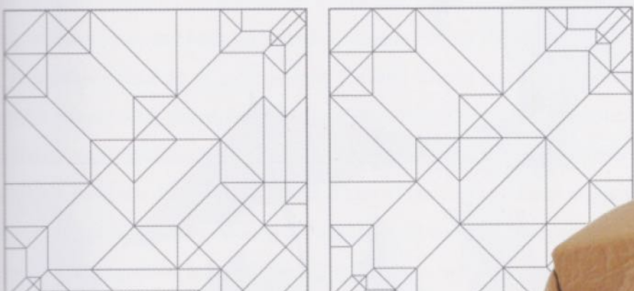


小鳥
Little Bird
▶P.92





バシリスク 2022
Basiliscus 2022
▶P.104





ヒキガエル
Japanese Toad
▶P.121

狐の嫁入り - 花嫁 -
Fox wedding -Bride-

▶P.131



狐の嫁入り - 花婿 -
Fox wedding -Groom-

▶P.146





狐の嫁入り - お付きの狐 -
Fox wedding -Retainers-

▶P.161



勝田恭平折り紙作品集 2
Origami Works of Kyohei Katsuta 2

まえがき　Preface

一冊目の作品集である『勝田恭平折り紙作品集』を出版するにあたって、日常生活の中に折り図を描く時間を取り入れるということをしていたのですが、現在でも作品を創作したらできるだけその直後に手順を整理して、そのまま折り図を描くという流れができています。また、そうして発表できる作品と折り図が増えていくことに充実感もあるので、作品集を出版したことは一つの転機となっており、大変有意義だったと感じています。

さて、相変わらず理論よりも感覚やアイディア優先で作品を作ってはいますが、昨今は作りたい形や使いたい技法が明確になり、使える技術の幅もひろがったので、本書にはより洗練された作品を掲載できたと思っています。

また、本書には複雑系の折り紙本には珍しく、複合や重ね折りといった、複数枚の紙を使う技術を用いた作品が多く掲載されています。不切正方一枚折りによる超複雑系の折り紙の魅力はよく知られていることでしょうが、その他の折り紙の魅力を引き出した作品も作りたいと考えています。例えば、三色以上の色で表現されたシンプルな作品は、場合によってはどれだけ折り込んだ単色の作品よりも大きな説得力を持つ場合があり、それを達成するために複数枚を使うというのは当然の帰結だと言えるかもしれません。

単純に折り図の通りに折り進めて作品を完成させるのももちろん折り紙の楽しみ方の一つですが、もし余力があれば、解説文や折り図、展開図、作例の写真などから、どういったアイディアで、どのような技法が、どういう目的で使われているのかを読み取りながら折ると、作品への理解度が深まり、より本書を楽しんでいただけるのではないかと期待しています。

When I published my first book, Origami Works of Kyohei Katsuta, I decided that I would incorporate time to draw origami diagrams into my daily life. Even now, when I finish designing a model, I rearrange the steps and draw origami diagrams as soon as possible. I feel a sense of fulfillment when the number of works and diagrams I can share with the public increases, so publishing the book was a very meaningful turning point for me.

Although I still make my models based on my senses and ideas rather than theory, I can now more clearly visualize the shapes I want to make and the techniques I want to use, which has expanded the range of techniques I can use. I believe I have been able to publish more sophisticated models in this current book.

In addition, this book has a number of works that use techniques with multiple sheets of paper, such as compound and layered folding, which is rare in books on complex origami. While the attractiveness of ultra-complex origami based on one uncut square sheet is probably familiar to most people, I would like to create works that bring out the charm of other types of origami. For example, a simple work expressed in three or more colors may in some cases be more compelling than any single-color work folded in arbitrarily many folding steps, and the use of multiple sheets to achieve this may be a natural consequence.

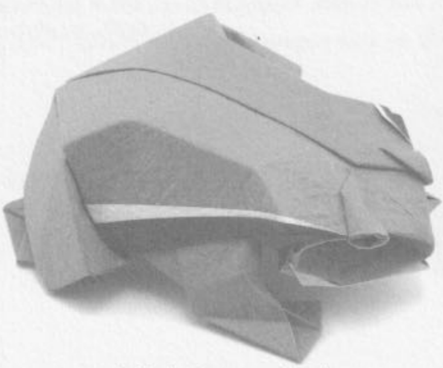
Simply following the diagrams is of course one of the ways to enjoy origami, but if you have the extra time, you can deepen your understanding of origami by reading the explanatory text at the beginning of each chapter, folding diagrams, crease patterns, and photographs of examples, to understand how the ideas and techniques are used for what purpose in the origami works. I hope you will enjoy this book even more.

2024年5月　勝田恭平　May 2024　Kyohei Katsuta

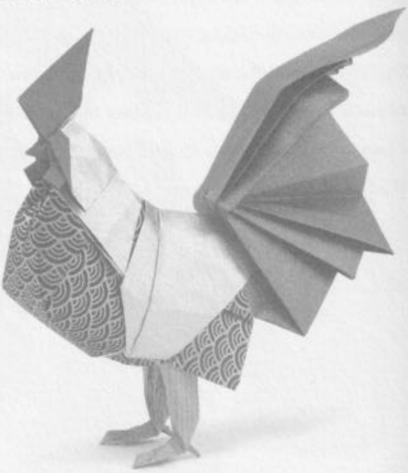
勝田恭平折り紙作品集 2

Origami Works of Kyohei Katsuta 2

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ヒキガエル／Japanese Toad



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折り図記号と基本の技法 Symbols and Basic Techniques

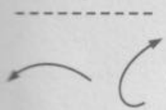
『勝田恭平折り紙作品集2』は、難しい折り紙作品の折り方の本です。折り方(折り図)には折り紙の専門用語や特殊技法ができます。それらは、初めて見る方には難しく感じられることも多いでしょう。

ここでは、それらの基本を示しました。折り進めるうちに、分からない用語や折り方に出会ったら、まずこのページを見直してみてください。「基本」ですから、必ずしも同一ではありませんが、解決の糸口はきっと見つかるはずです。

In *Origami Works of Kyohei Katsuta 2*, you will see in the diagrams many technical terms and folding techniques which are not familiar to you. The following pages show you the very basic terms of origami. Always refer to them when you are in trouble. As they only describe only the basics, you may not find the exact term you are looking for, but the basics here certainly will help you solving the problem.

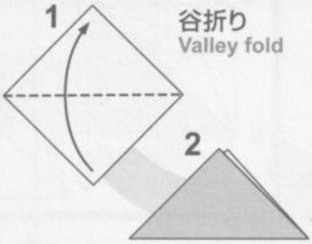
折り線の種類 Types of crease lines

谷折り線
Valley fold

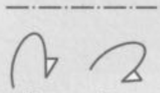


手前で折る
Fold paper forwards

谷折り
Valley fold

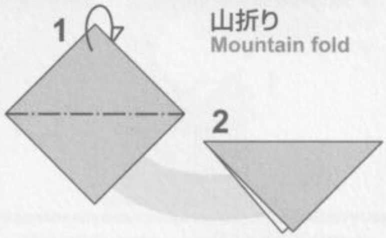


山折り線
Mountain fold



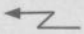
後ろへ折る
Fold paper backwards

山折り
Mountain fold

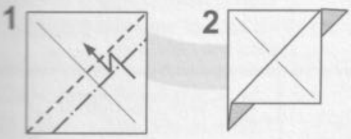


いろいろな記号 Symbols

段折り Pleat fold

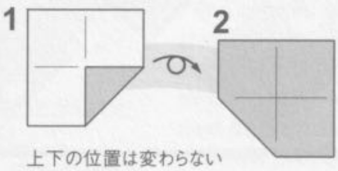


横から見ると段になっているように見える
Pleats are formed when you look from the side.



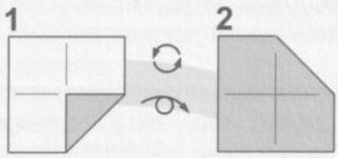
裏返す Turn paper over





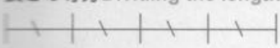
上下の位置は変わらない
Don't rotate the paper upside down.

上下が変化する場合は回転記号を併用する
When turning over vertically, the rotation symbol is also used.

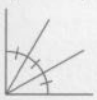


等分記号 Division

長さの等分 Dividing the length

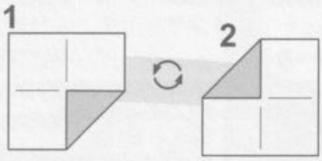


角度の等分
Dividing the angle



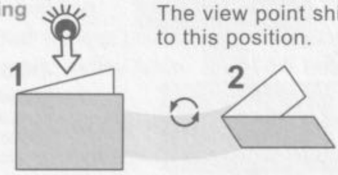
紙の向きを変える Rotation





視点が変わる
The view point shifting

視点が大きく変わる場合この記号の位置から見る
The view point shifts to this position.

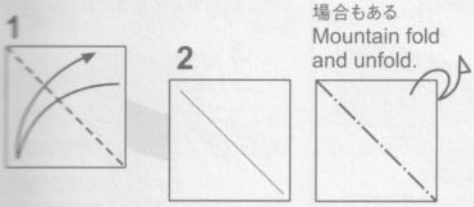


折り筋をつける Making a crease line



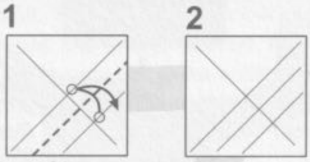
一度折ってから戻して折り筋をつける
Fold and mark a crease line, then unfold.

山折りにつける場合もある
Mountain fold and unfold.

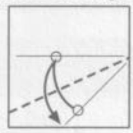


特殊な折り筋のつけ方
Various types of crease lines.

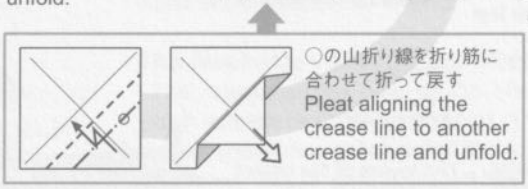
折り筋と折り筋を合わせて折り筋をつける
Fold line to line and unfold.

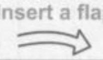


斜めにつける場合もある
Pleated crease lines sometimes divide an angle.



○の山折り線を折り筋に合わせて折って戻す
Pleat aligning the crease line to another crease line and unfold.

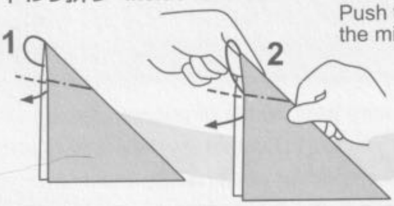


次の図を拡大 A magnified view	隠れた線・形 A hidden line / layer	引き出す 差し込む Pull out Insert a flap	ひろげる Open up	注意するところ Marked points (reference points)	同じ場所を示す These points are on top of each other.	押す・つぶす Push paper in	直角 Right angle
				○ ●	☆★		

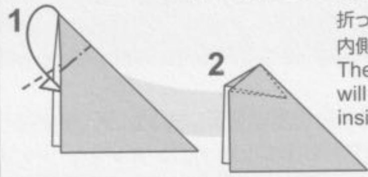
折り方の技法 Basic Folding Skills

中わり折り Inside reverse fold

内側を割るように折ってカドを出す
Push the corner inside as the middle layer.



カドを内側に折る Inside reverse fold (Fold the corner in)

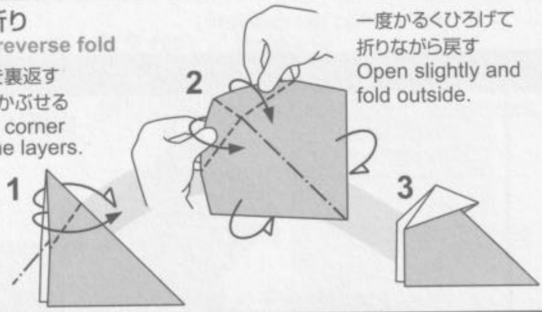


折ったカドが
内側に隠れる
The folded corner will be hidden inside.

かぶせ折り Outside reverse fold

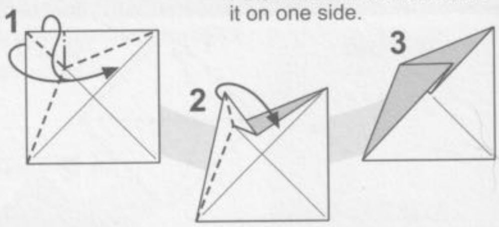
両側の紙を裏返す
ようにしてかぶせる
Wrap the corner around the layers.

一度かるくひろげて
折りながら戻す
Open slightly and fold outside.



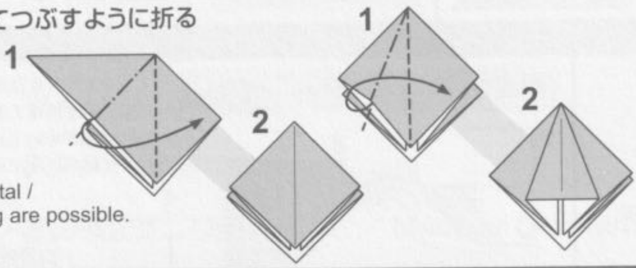
つまみ折り Rabbit-ear fold

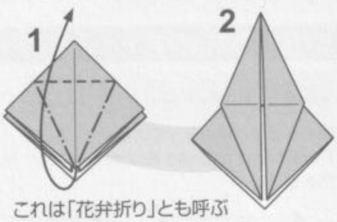
カドをつまむようにしながら
折りたたむ
Pinch the corner and flatten it on one side.



内側をひろげてつぶすように折る Squash fold

角度が違ったり
部分的に
折る場合もある
Many types of total / partial squashing are possible.

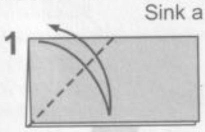


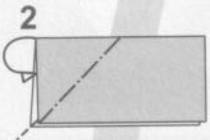


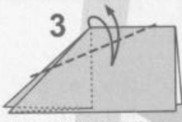
これは「花弁折り」とも呼ぶ
This type of squashing is called the petal fold.

沈め折り Sink

沈めるように折った部分が内側に隠れる
Sink a layer/corner and hide it inside.

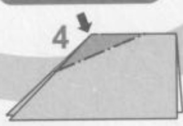






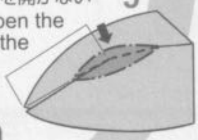
沈め折りする部分に
折り筋をつける
Mark the crease line to use for sink.

Closed sink クローズド・シンク

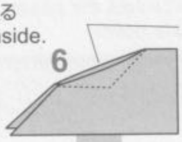


■の部分を
沈めるように折る
Push in the grayed corner.

この重なりを開かない
Do not open the layers of the corner.

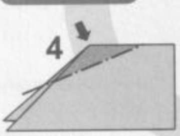


途中の図
ついている折り筋で
押し込むように折る
Sink in action.
Push in with layers overlapped onto each other.



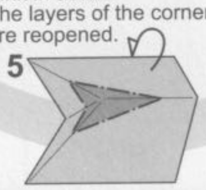
紙のヒダが閉じた
(closed)かたちに
なっている
The layers are locked.

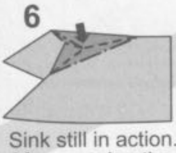
Open sink オープン・シンク



■の部分を
沈めるように折る
Push in the corner.

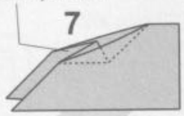
途中の図1
一度ひろげて■のまわりの
折り筋を山折りにつけなおす
Sink in action.
The layers of the corner are reopened.





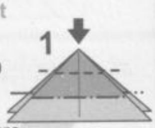
途中の図2
ついている折り筋で
■の部分を沈め
ながら折りたたむ
Sink still in action.
After opening the corner lightly, push in without overlapping layers.

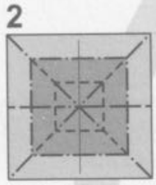
紙のヒダが開いた(open)
かたちになっている
The layers can be reopened.



沈めるように段折り Sink in and out

■の部分を
沈めるように段折り
Sometimes sink requires the pleat-like structure by sinking in and out.

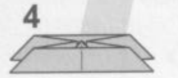




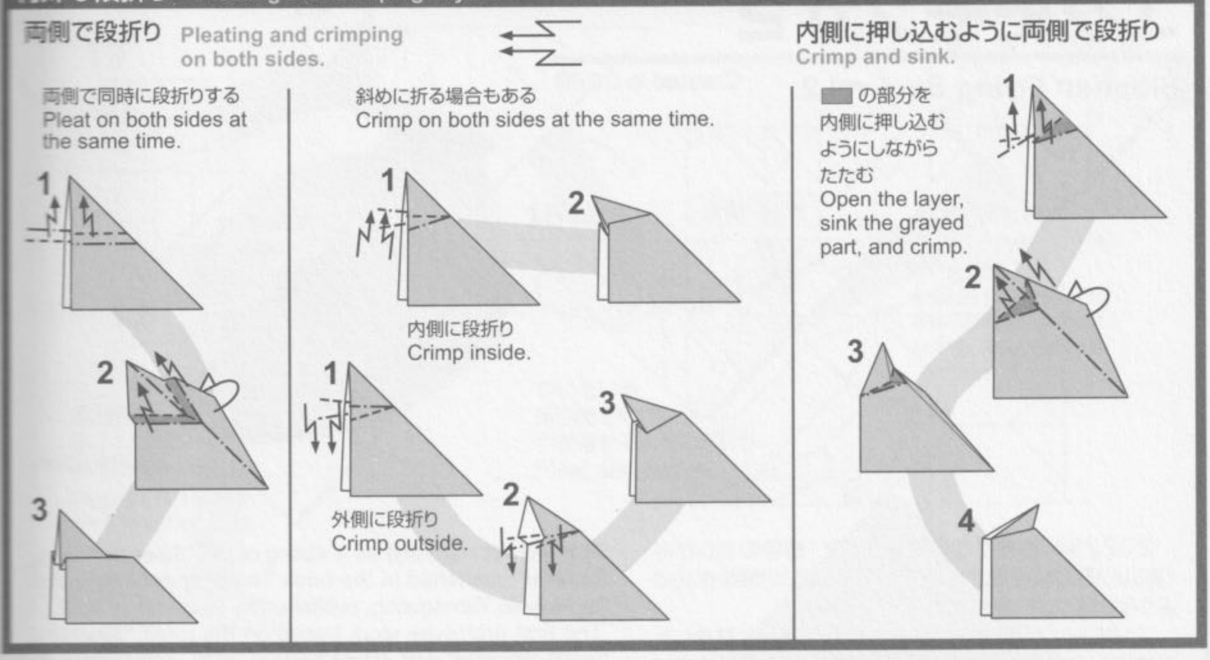
一度ひろげて
図のように折り筋
をつけなおす
■のまわりの
山折りを先に
折ると良い
In such cases, open the corner once, and make crease lines as they should be. Start from the mountain folds around the gray area.



それぞれ
カドのところからつまむ
ようにして折りたたむ
Pinch the corners and flatten.



特殊な段折り Pleating and Crimping Layers



●折り紙初心者の方へ

1.本書の作品の多くは、最初の段階で折り筋をたくさんつけます。とても大切な作業ですので、つけ間違いのないよう、よく折り図を見て進んでください。

2.折り筋は正確にはっきりとつけてください。カドや○で示したところは、間違いやすい部分ですから特に注意しましょう。

3.紙の裏と表、向きは大事です。1工程折るたびに紙を図と同じ向きに並べ、正確に折れているかどうか確認していくと間違いを防ぐことができます。

4.一見複雑な折り方があっても、折り線には「山」と「谷」しかありません。あわてず1つ1つ折り紙と図を見比べて、まずは図の通りに折り筋をつけてみてください。また、少し先の図を見て、折った後の形をイメージしながら折るのも良いでしょう。

5.難しい作品ばかりですから、一度の挑戦では上手に折れない場合もあります。初めて折る場合は、まず練習(試作)のつもりで折りましょう。練習には市販の折り紙用紙が適しています。

6.作品は何度も折るうちに、きれいに折れるようになっていきます。難しい折り紙には、何よりも根気が大事です。

7.何度も紙を折りたたみますから、途中で紙がぼろぼろになり形が分からなくなることもあります。そんな場合は思い切って最初から折り直しましょう。また少しの破れなら、セロハンテープで裏から貼り合わせ、そのまま折り進めても良いでしょう。

●「推奨用紙」について

○本書では、折りが細かすぎて小さな紙で折ることができない作品があります。そのため、基準となる「推奨用紙」を付記しました。

○これはあくまで目安です。「推奨用紙」よりも小さな紙で折ることも可能ですが、最初は避けて、できればより大きめの紙で折ることをお勧めします。

○ 中には、折り紙用紙として入手しづらい大きさもあります。その場合はなるべく薄くて丈夫な紙(例えば一番薄い上質紙など)を探し、正方形に切って使ってください。

To Origami Beginners and Novices:

The models in this book require that you make many crease lines before assembling. The process of creasing is very important for the completion of the folding of the model, so do as precisely as possible, always with the next diagram as your reference.

Crease precisely. Don't crease from/through the wrong corners or reference points.

Take special care on the side and orientation of the sheet. When you have done one step, carefully check your folded model with the diagram orienting them towards the same direction.

Keep in mind that folding processes in origami only consist of moutain and valley folds. Your best reference is always the next diagram.

It is the fact of life that the models in this book are difficult, so don't expect that you can fold them beautifully in your first try. Use regular origami paper for practice.

Be patient. You can make it in the end.

Sometimes the paper will be ragged and torn into pieces. If this happens, take another sheet of paper and start from the beginning. If the raggedness is not so disastrous, you may be able to tape the back of the sheet and continue your folding.

The Necessary Size of the Sheet:

The recommended size of the sheet of paper with which you fold is written in the text. This is because the models sometimes need very skillful foldings.

However, this is only RECOMMENDED. We suggest you start with a larger sheet, but you can always be a challenger!

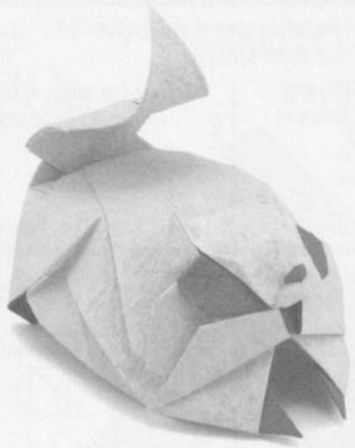
Regular origami sheets may not have the recommended sizes. If so, take thin and strong paper and cut it into a square.

エゾモモンガ 2

Siberian Flying Squirrel 2

Created in 2020





推奨用紙 25cm

2022年に西東社から発行された『超絶のおりがみ（著:山口真）』に掲載された「エゾモモンガ」の姉妹作品のような位置づけの作品です。

エゾモモンガをモチーフとした作品を最初に試作したのは2017年辺りですが、実はこの作品の方が初期の試作に近い構造とデザインでした。当時はどうしても納得のいく形を見つけることができず、比率などを変更して問題を解消しながら別路線に向かったのが『超絶』のバージョンです。そのしばらく後、改めて古い試作に手をつけたところ、当時見つけられなかった形にすんなりとたどり着くことができました。

外見的には口の表現が特徴的で、試行錯誤している間に現れた「割れ」がそう見えたところから採用しましたが、この部分の再現性が低かったことも、最初の試作で断念した理由の一つでした。

また、どちらのエゾモモンガも、一般的にモモンガと聞いてイメージする飛行している膜をひろげたポーズでないのは、既存の作品にないアプローチで作品をデザインするということを意識した結果です。

手順は上手く整理できたので、やや細かく難しい頭部を乗り越えられれば、比較的スムーズ折り進められると思います。14と15の間の裏返し記号が忘れられがちなので、気をつけてください。

This work is regarded as a sibling of the "Siberian Flying Squirrel" published in the book Transcendent Origami (by Makoto Yamaguchi), published by Seitosha in 2022.

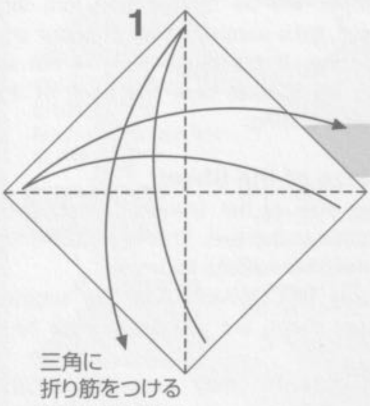
The first prototype work based on the motif "Siberian Flying Squirrel" was made around 2017, and in fact, it was closer to the current model in the structure and design. At the time, I just couldn't find a satisfactory shape, so I went on a different route, changing the proportions and solving other issues as I went along. This is reflected in the "Transcendent" version. Sometime later, when I reworked the old prototype, I was easily able to find a shape that I could not find then.

The representation of the mouth is unique, which I adopted because the "cracks" that showed up during the trial-and-error process seemed to fit the representation of it. However, I abandoned this idea at first due to the low replicability of this part.

Neither model shows the pose of spreading their patagia in flight, which we imagine when we hear the word "flying squirrel." This is because I wanted to design a model with a brand-new approach.

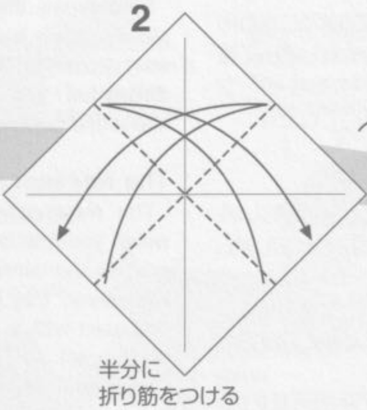
The steps were well organized, and if you can get past the somewhat detailed and difficult head, you should have a relatively smooth folding process. The turn-over symbol between 14 and 15 is missed often, so watch out for it.

1



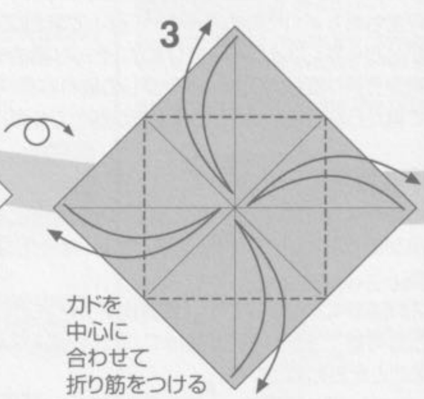
三角に
折り筋をつける
Fold in halves
and unfold.

2



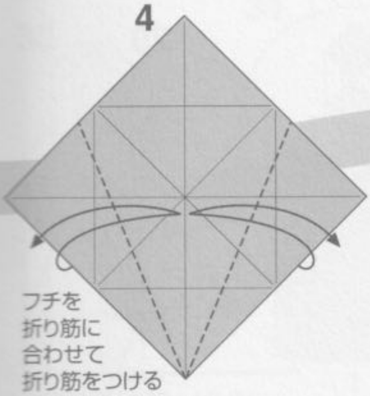
半分に
折り筋をつける
Fold in halves
and unfold.

3



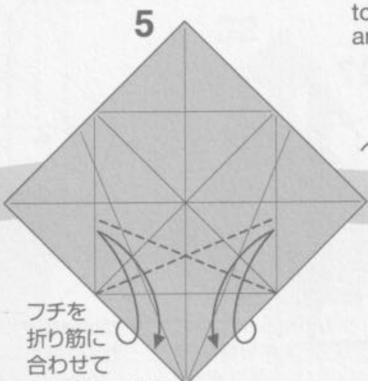
カドを
中心に
合わせて
折り筋をつける
Fold the corners to
the center and unfold.

4



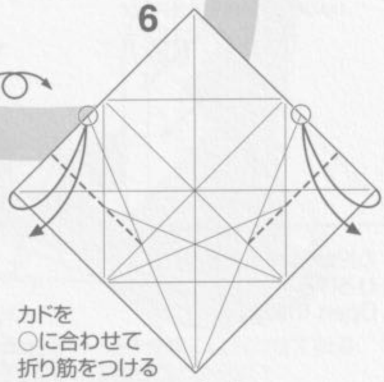
フチを
折り筋に
合わせて
折り筋をつける
Fold the edges to the crease and unfold.

5



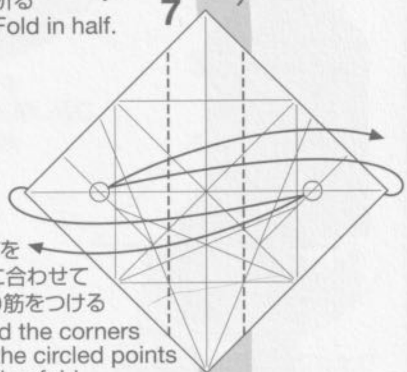
フチを
折り筋に
合わせて
折り筋をつける
Fold the edges to the creases and unfold.

6



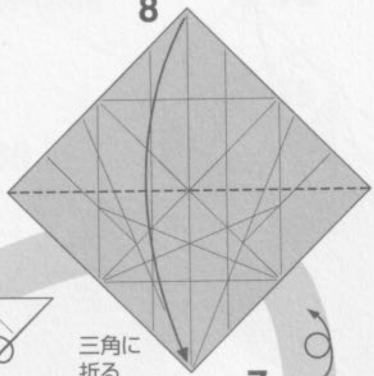
カドを
○に合わせて
折り筋をつける
Fold the corners to the circled points and unfold.

7



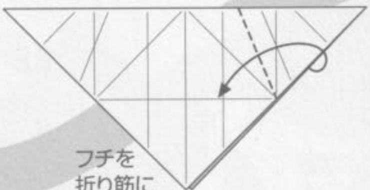
カドを
○に合わせて
折り筋をつける
Fold the corners to the circled points and unfold.

8



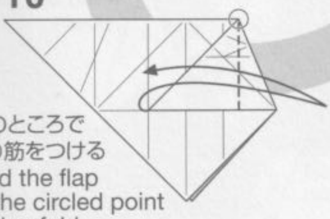
三角に
折る
Fold in half.

9



フチを
折り筋に
合わせて折る
Fold the edge to the crease.

10



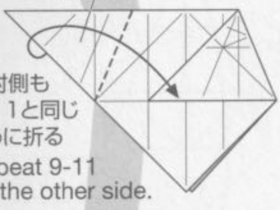
○のところで
折り筋をつける
Fold the flap at the circled point and unfold.

11



フチを
折り筋に
合わせて
折り筋をつける
Fold the edge to the crease and unfold.

12 9-11



反対側も
9-11と同じ
ように折る
Repeat 9-11 on the other side.

13



カドを戻す
Unfold.

14

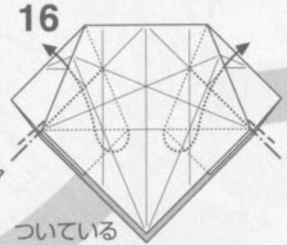


15



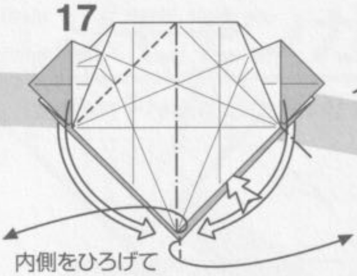
ついている
折り筋で内側に
引き寄せるように段折り
Pleat and swivel.

16



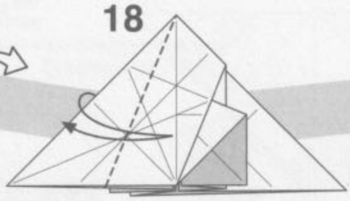
ついている
折り筋で内側のカドを
中わり折り
Inside reverse fold the hidden corner using the creases.

17



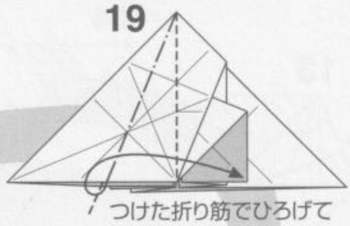
内側をひろげて
ついている折り筋で折りたたむ
Pinch the two corners and
flatten the raised flaps.

18



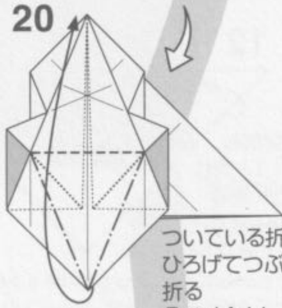
フチを折り筋に合わせて
折り筋をつける
Fold the edge to the
crease and unfold.

19



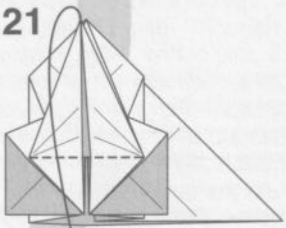
つけた折り筋でひろげて
つぶすように折る
Open and squash.

20



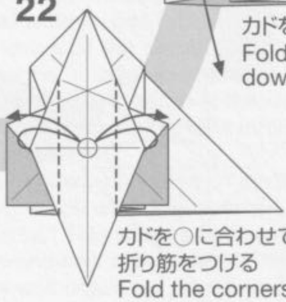
ついている折り筋で
ひろげてつぶすように
折る
Petal fold.

21



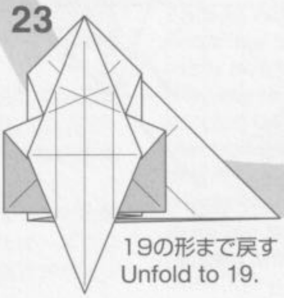
カドを下へ折る
Fold the flap
down.

22



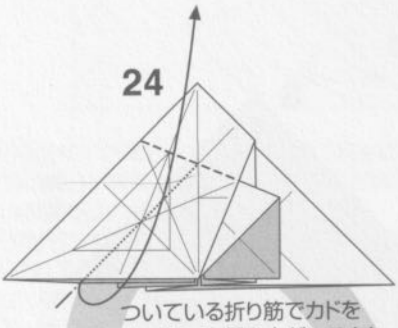
カドを○に合わせて
折り筋をつける
Fold the corners
to the circled point
and unfold.

23



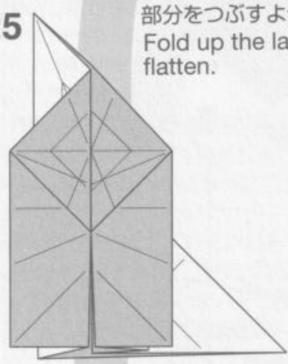
19の形まで戻す
Unfold to 19.

24

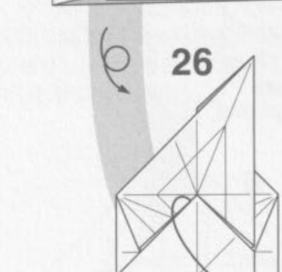


ついている折り筋でカドを
上へ折って起き上がってきた
部分をつぶすように折る
Fold up the layer and
flatten.

25

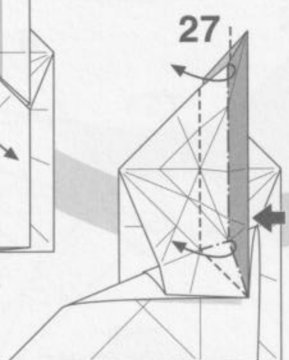


26



カドをかるく反対側へ
ひろげる
Open the layer.

27



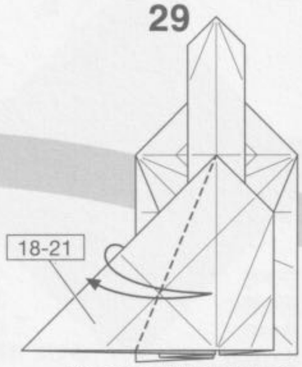
ついている折り筋を使って
フチをひろげてつぶすように折る
Squash using the creases.

28



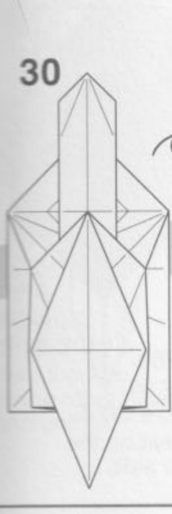
カドを戻す
Close the layer.

29

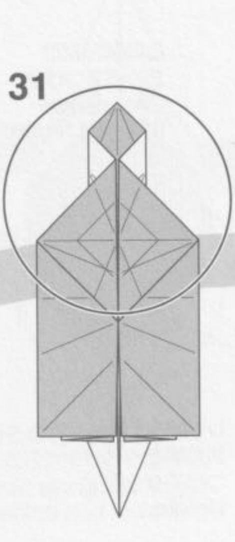


18-21と同じように折る
Repeat 18-21.

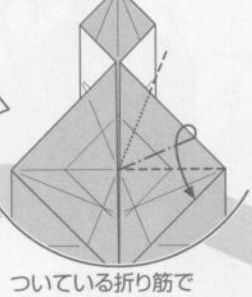
30



31

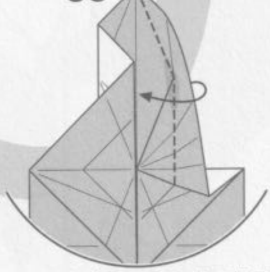


32



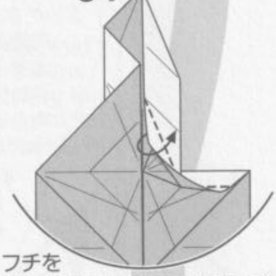
ついている折り筋で
引き寄せるように折る
35まで平らにはならない
Squash using the creases.
The model will not lie flat
until 35.

33



フチを中心に合わせて折る
平らにはならない
Fold the edge to the
center.

34



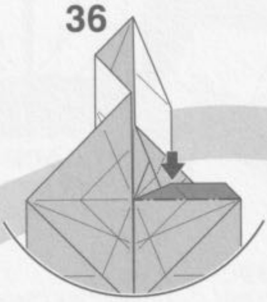
フチを
折り筋に合わせて折りたたむ
Fold the edge
to the crease. Flatten.

35



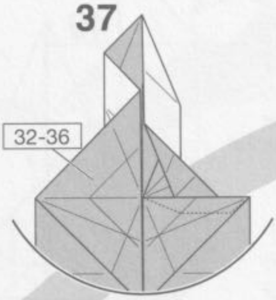
フチを
上へ折る
Fold the
flap up.

36



■の部分を
沈めるように押し込む
Closed sink.

37



反対側も32-36と
同じように折る
Repeat 32-36
on the other side.

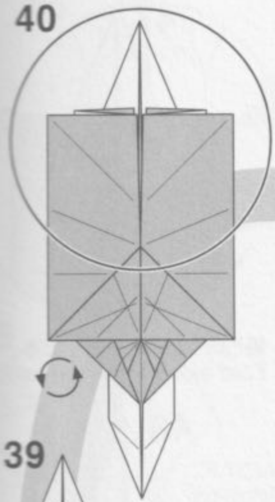
38



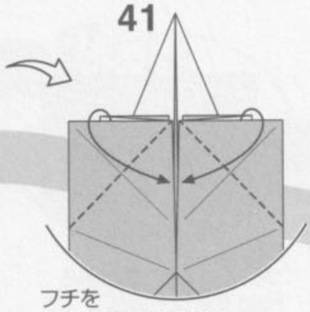
39



40

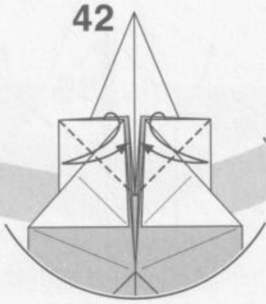


41



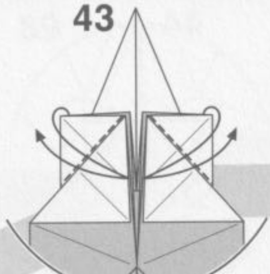
フチを
中心に合わせて折る
Fold the edges
to the center.

42



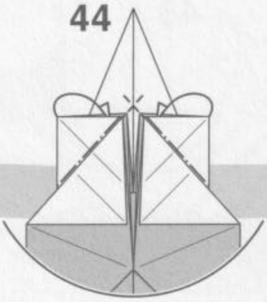
手前の1枚のフチと
フチを合わせて
折り筋をつける
Fold edge to edge
and unfold.

43



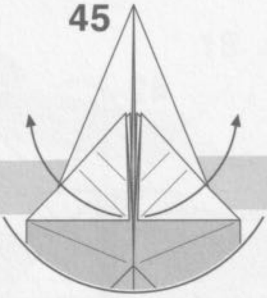
フチのところで
折り筋をつける
Fold along the edge
and unfold.

44



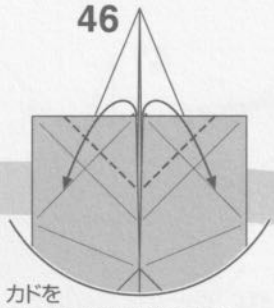
つけた折り筋で
カドを内側に折る
Inside reverse fold.

45



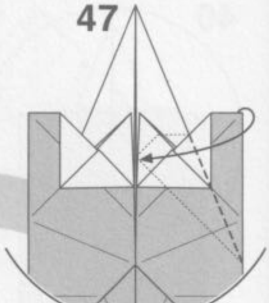
カドをひろげる
Unfold the corners.

46



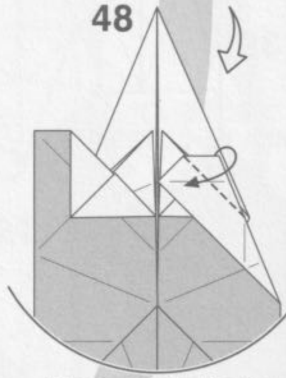
カドを
ついている折り筋で折る
Fold the corners
along the creases.

47



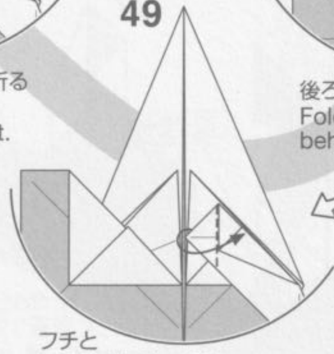
後ろのフチのところで折る
Fold along the edge behind.

48



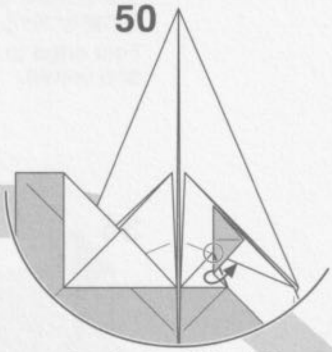
後ろのフチのところで折る
Fold along the edge
behind.

49



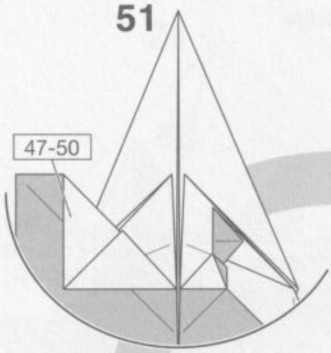
フチと
フチを合わせて折る
Fold edge to edge.

50



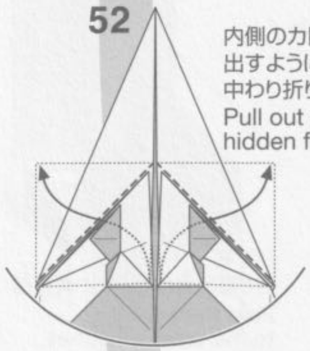
○のところで斜めに折る
Fold the corner
at the circled point.

51



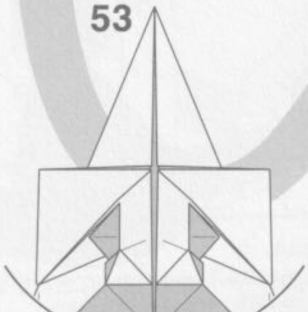
反対側も47-50と
同じように折る
Repeat 47-50
on the other side.

52

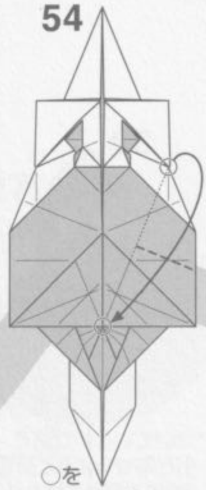


内側のカドを
出すように
中わり折り
Pull out the
hidden flaps.

53



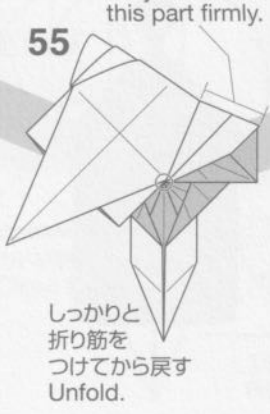
54



○を
合わせて折る
Fold the upper
circled point
down to the
lower circled point.

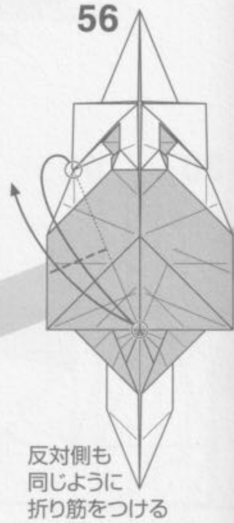
55

この部分だけ
折り筋をつける
Only crease
this part firmly.



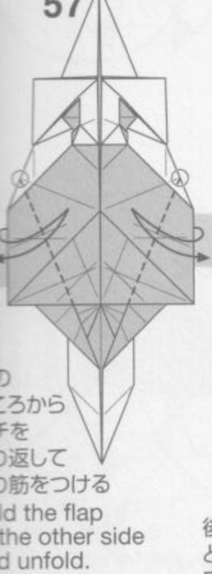
しっかりと
折り筋を
つけてから戻す
Unfold.

56



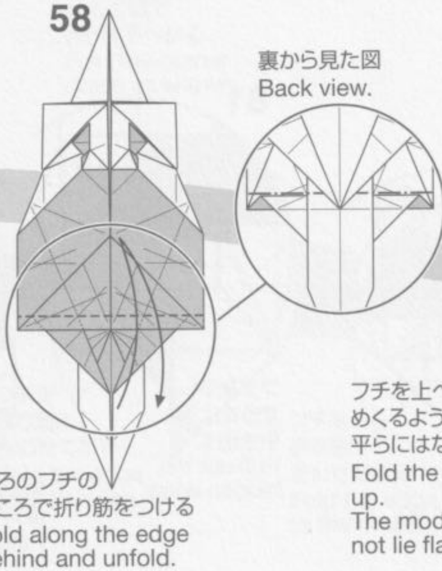
反対側も
同じように
折り筋をつける
Repeat on the
other side.

57



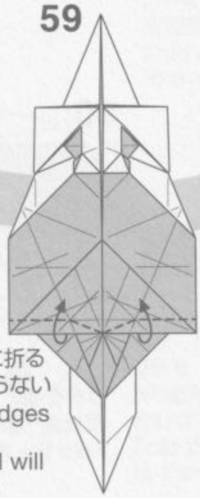
○のところからフチを折り返して折り筋をつける
Fold the flap to the other side and unfold.

58



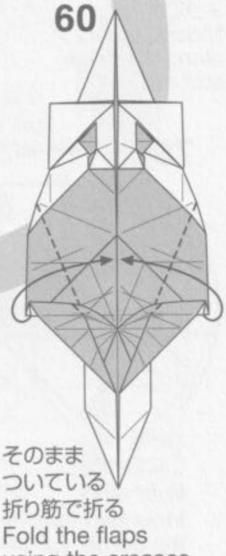
後ろのフチのところで折り筋をつける
Fold along the edge behind and unfold.

59



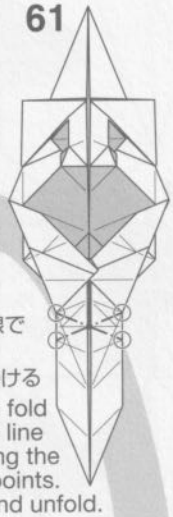
フチを上へめくるように折る
平らにはならない
Fold the edges up.
The model will not lie flat.

60



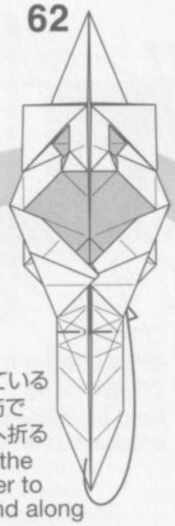
そのままついている折り筋で折る
Fold the flaps using the creases.

61



○を結ぶ線で山折りの折り筋をつける
Mountain fold along the line connecting the marked points. Crease and unfold.

62

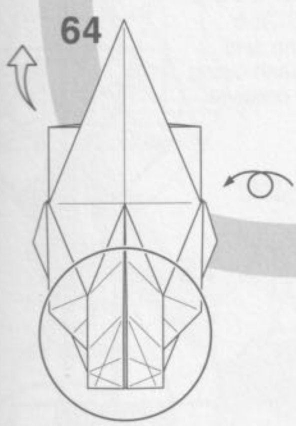


ついている折り筋で後ろへ折る
Fold the corner to behind along the crease.

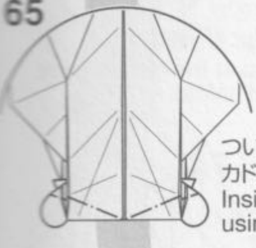
63



64



65



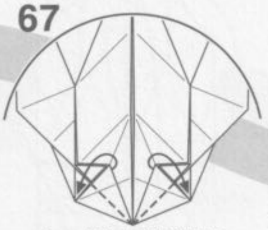
ついている折り筋でカドを内側に折る
Inside reverse fold using the creases.

66



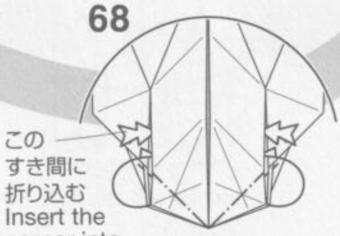
カドを反対側へ折る
Fold the corners to the other side.

67



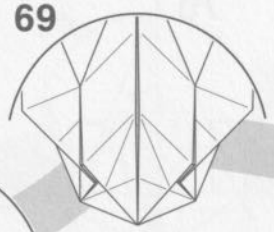
しっかりと折り筋をつけてから戻す
Fold the corners down.

68

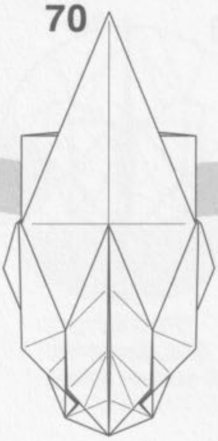


つけた折り筋で手前のすき間に折り込む
Fold the corners to inside.

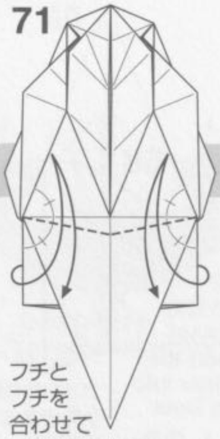
69



70

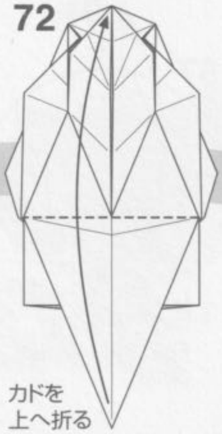


71



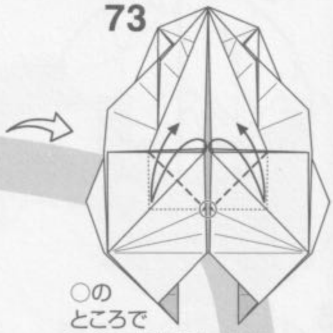
フチと
フチを
合わせて
折り筋をつける
Fold edge to edge
and unfold.

72



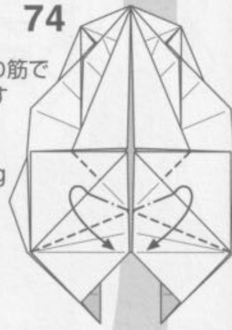
カドを
上へ折る
Fold the corner up.

73



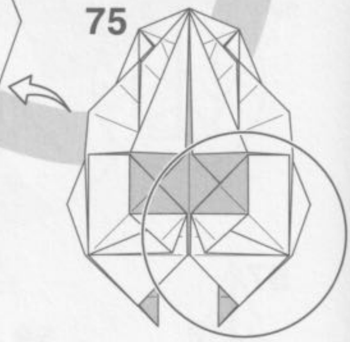
○の
ところで
三角に折り筋をつける
Fold at the circled point
and unfold.

74

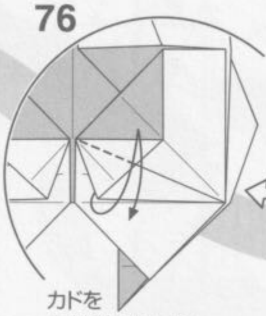


ついている折り筋で
ひろげてつぶす
ように折る
Open and
squash using
the creases.

75

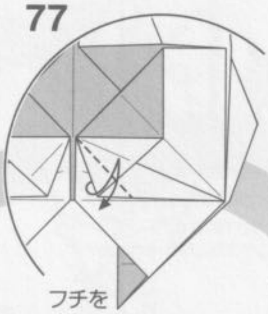


76



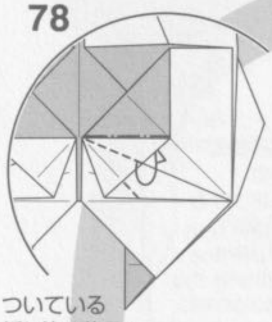
カドを
反対側へ折って
折り筋をつける
Fold the flap up
and unfold.

77



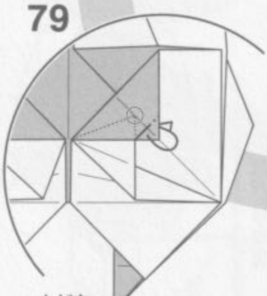
フチを
折り筋に合わせて
折り筋をつける
Fold the edge to the
crease and unfold.

78



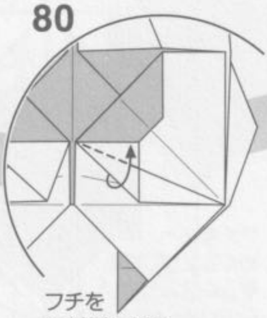
ついている
折り筋で後ろへ
引き寄せる
ように折る
Mountain fold
along the edge
and swivel.

79



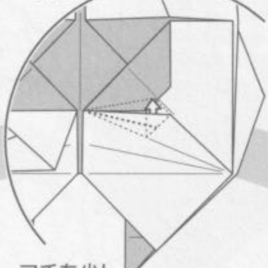
カドを
○に合わせて
後ろへ折る
Mountain fold
the corner to
the circled point.

80



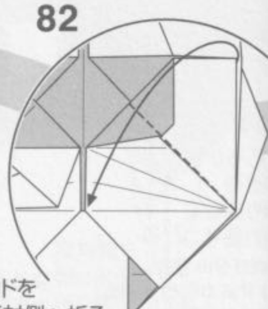
フチを
反対側へ折る
Fold the flap up.

81



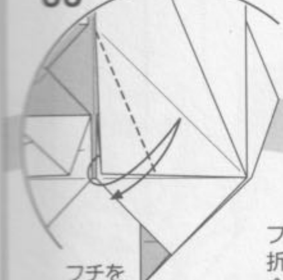
フチを少し
ずらすように
引き出す
Pull out the
hidden edge.

82



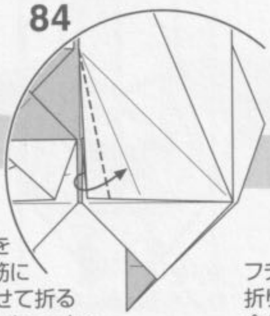
カドを
反対側へ折る
Fold the flap down.

83



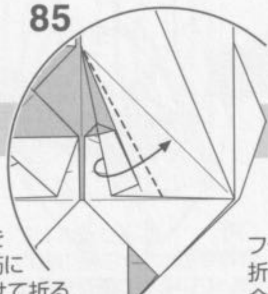
フチを
折り筋に合わせて
折り筋をつける
Fold the edge
to the crease
and unfold.

84



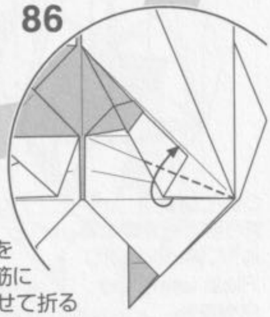
フチを
折り筋に
合わせて折る
Fold the edge
to the crease.

85



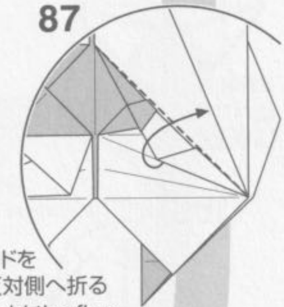
フチを
折り筋に
合わせて折る
Fold the edge
to the crease.

86



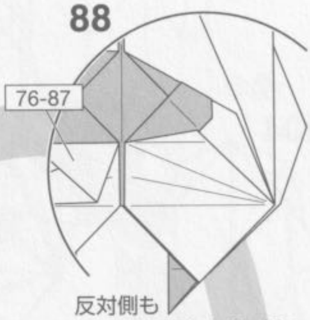
フチを
折り筋に
合わせて折る
Fold the edge
to the crease.

87



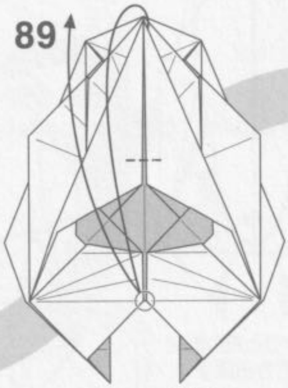
カドを
反対側へ折る
Fold the flap
to the other side.

88



反対側も
76-87と同じように折る
Repeat 76-87 on the
other side.

89



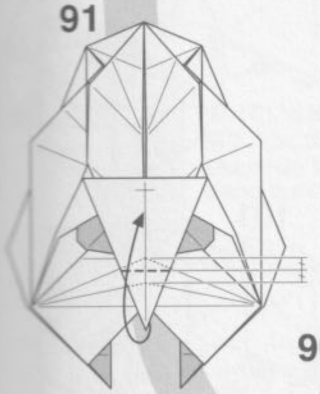
カドを◯に合わせて
印をつける
Fold the corner
to the circled
point and unfold,
but only mark
at the center.

90



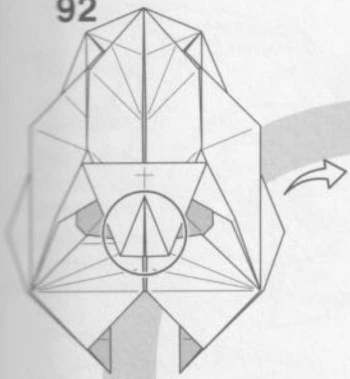
図の位置で
カドを下へ折る
Fold the corner
down as shown.

91



図の位置で
カドを上へ折る
Fold the
corner up
as shown.

92

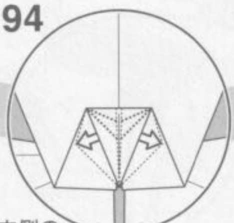


93



カドを◯に合わせて折る
Fold the corner
to the circled point.

94



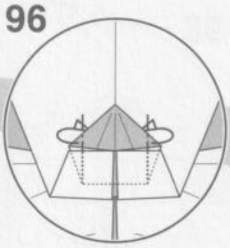
内側の
フチを引き出す
Pull out the edges.

95



カドを起こしながら
フチを後ろへ折る
Fold the edge
to behind and
swivel the layer.

96



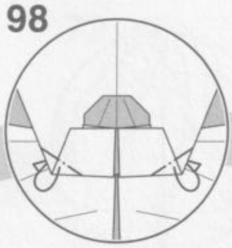
カドを後ろへ折る
Fold the corners to behind.

97



カドを後ろへ折る
Mountain fold the corner.

98



カドを後ろへ折る
Mountain fold the corners.

99

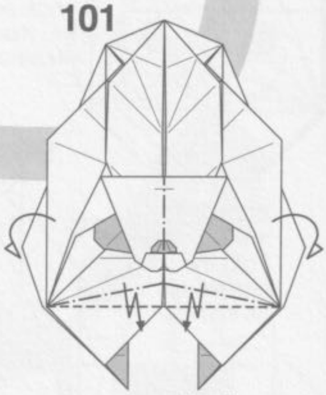


フチを斜めに後ろへ折って口の形を作る
Mountain fold the edge to make a mouth.

100

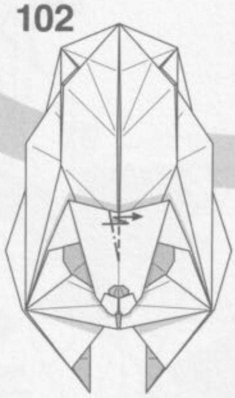


101



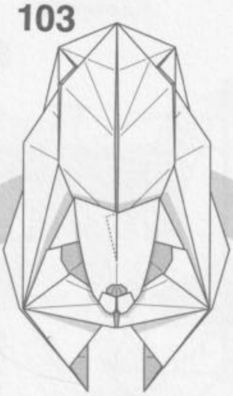
ついている折り筋で立体化しながら斜めに段折り
Pleat using the creases and make the model 3-D.

102



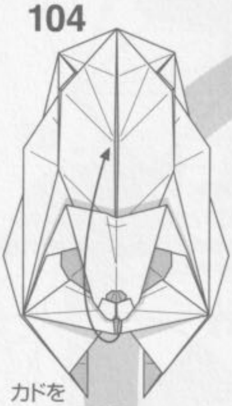
斜めに段折り
Pleat.

103



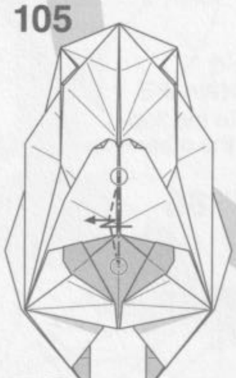
しっかりと折り筋をつけてから戻す
Firmly crease and unfold.

104



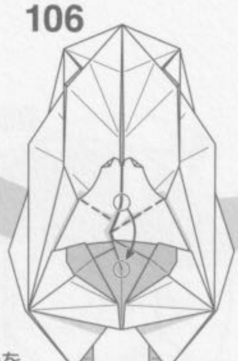
カドを上へひろげる
Unfold.

105



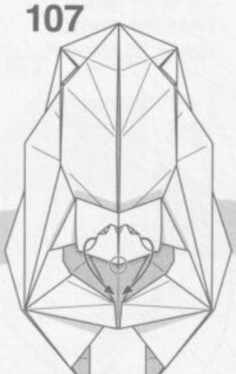
ついている折り筋で引き寄せるように斜めに段折り
Pleat using the creases.

106



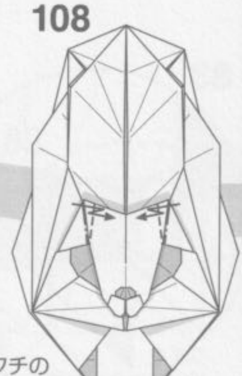
○を合わせてついている折り筋で折る
Fold so that the circled points align.

107



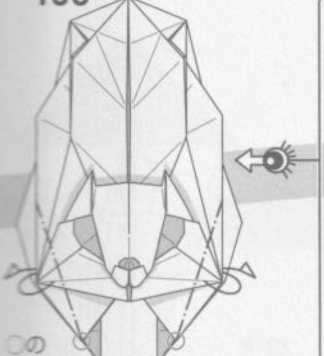
カドをかぶせるようにする
The 3-D flap now covers the lower 3-D flap.

108



フチのところでカドをつまむように段折り
Pinch the corners and pleat.

109

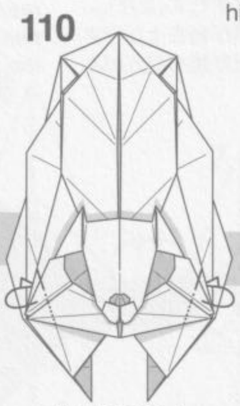


○の
ところで
斜めに山折りの折り筋を
つける
Mountain fold at the
circled points and unfold.



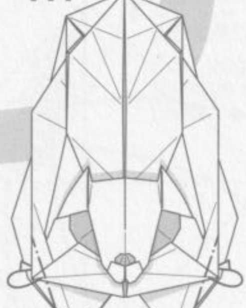
横から見た図
Side view.

110



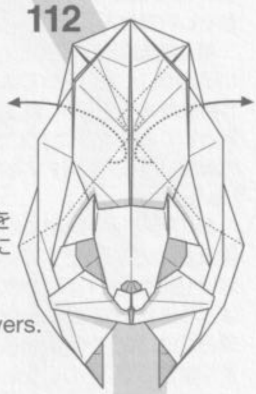
つけた折り筋で
内側の層のカドだけ
後ろへ折る
Only mountain fold
the middle layers
along the creases.

111



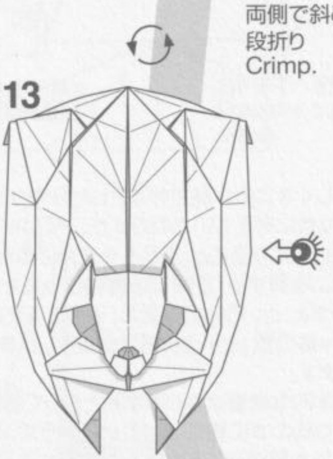
カドを
斜めに後ろへ折る
Fold the corners
to behind.

112

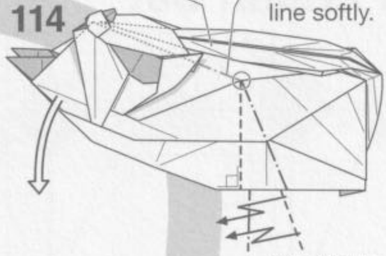


後ろのカドを
起こすように
ひろげる
Open the
hidden layers.

113



114



しっぽのカドは
外に出す
Put out the
flap for the tail.

ここは曲げる
ように折って
癖をつける
Fold this
line softly.

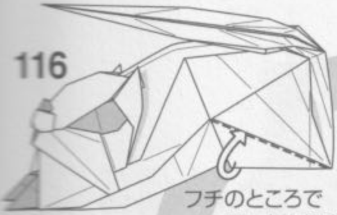
両側で斜めに
段折り
Crimp.

115



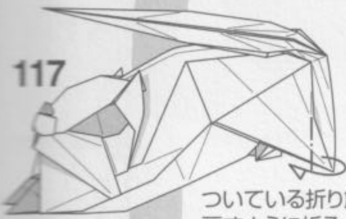
後ろ足のカドを
かるくひろげる
Open the layers.

116



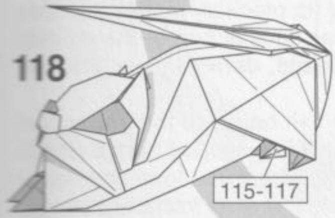
フチのところで
すき間に折り込む
Fold along the
edge and put
the corner inside.

117



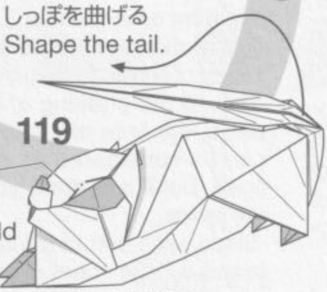
ついている折り筋で
戻すように折る
Mountain fold
using the crease.

118



反対側も115-117と
同じように折る
Repeat 115-117
behind.

119



しっぽを曲げる
Shape the tail.

つまんで
目の形を作る
Mountain fold
and shape
the eyes.

全体の形を整える
Shape the model.

120

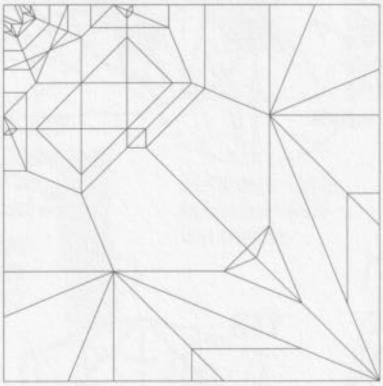


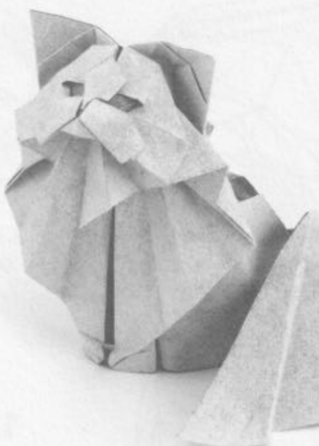
できあがり
Model completed.

ペルシャ猫

Persian Cat

Created in 2021





推奨用紙 25cm

新しくネコの作品を作るとしたらやりたいことというのは常に考えているのですが、その中に目の形を平行四辺形にすること、そしてマズルにあたる部分を立体的に表現する(正確には真横から見た時の鼻の輪郭を作る)というものがあり、その2点を達成した「ペルシャ猫の頭」という作品から派生した作品の一つとなります。

基本的な構造は魚の基本形となっており、幼児向けの折り紙の本に掲載されているようなシンプルな動物作品を極限まで折り込んだような作品とも言えるかもしれません。

首と前脚のふんわりとした毛をプリーツで表現している関係上、紙によっては顔が起き上がりやすいという特徴がありますが、見上げているようなポーズの解釈として考えていただくか、どうしても気になる方は内側で少しのりづけするなどして工夫するとよいでしょう。

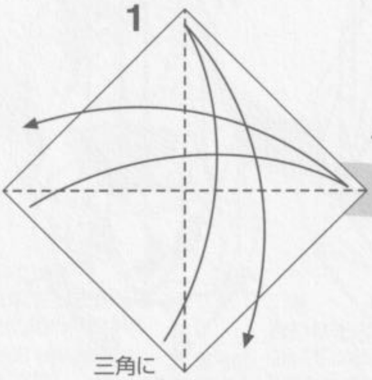
顔の各パーツが細かくなるのでそれなりに大きい用紙の方が安心ですが、厚みはそれほど問題にならない(顔され折れれば)作品なので、腕に覚えがあればより小さい紙でも十分に折れるはずです。ただし、厚みのある紙では前述したように顔が起き上がりやすくなるので、その辺りも考慮して紙を選んだ方がよいかもしれません。

I always think about what I would like to do if I were to design a new cat model, and one of such ideas is to make the eyes parallelogram-shaped and to express the muzzle three-dimensionally (to precisely outline the nose when viewed from the side). This is one of the models that achieved these two points, derived from "Persian Cat's Head."

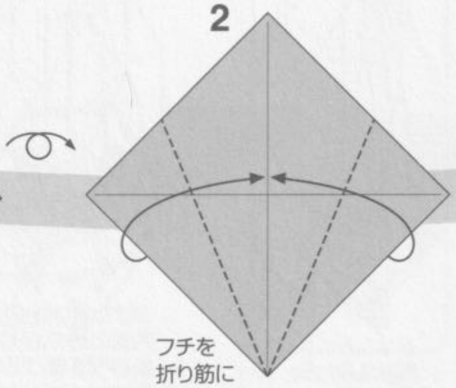
The basic structure is the fish base, so that the model might be described as a model developed from a simple animal model, such as those found in origami books for young children, to the utmost limit of its foldability.

Due to the pleating of the fluffy hair on the neck and paws, the face tends to rise up with some paper. This can be considered as an interpretation of the look-up pose, but if it bothers you, you can try gluing a little on the inside.

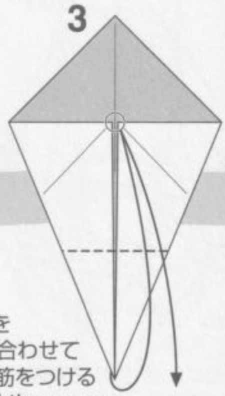
Since each part of the face is highly detailed, it is better to use a large sheet of paper for folding. In this work, the paper's thickness does not matter much as long as the face can be folded, so if your skill is good enough, a smaller sheet of paper should be sufficient. However, as mentioned above, thicker paper makes the face easily rise up, so you may want to consider this when choosing the paper.



三角に
折り筋をつける
Fold in halves
and unfold.

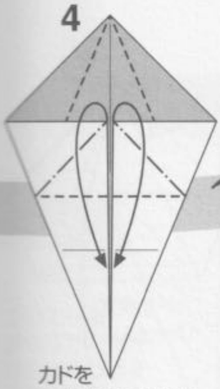


フチを
折り筋に
合わせて折る
Fold the edges
to the crease.



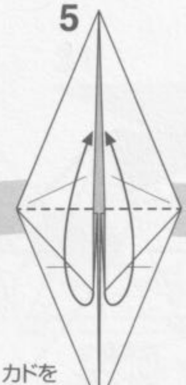
カドを
○に合わせて
折り筋をつける
Fold the corner
to the circled point
and unfold.

4



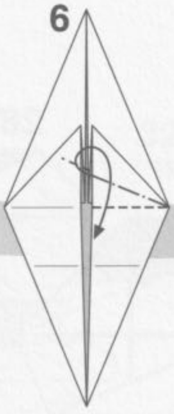
カドを
つまむように折る
Pinch the corners
and fold them down.

5



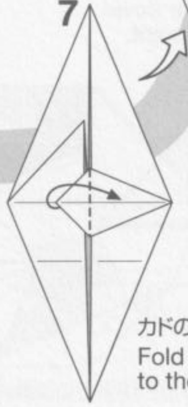
カドを
上へ折る
Fold the flaps up.

6



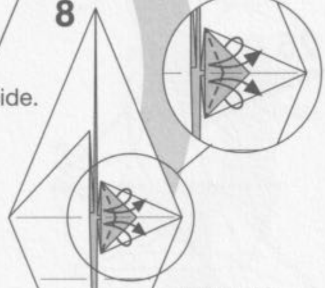
内側をひろげて
つぶすように折る
Open and squash.

7



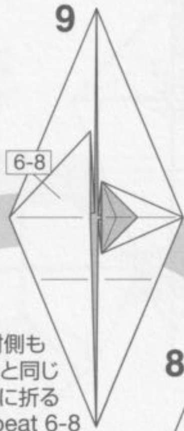
カドのところで折る
Fold the corner
to the right.

8



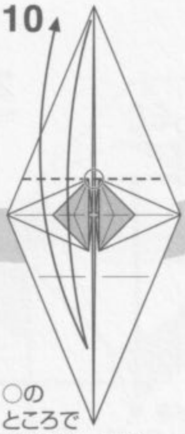
フチとフチを
合わせて
折り筋をつける
Fold edge
to edge and
unfold.

9



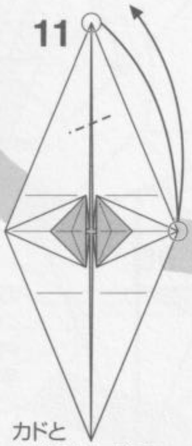
反対側も
6-8と同じ
ように折る
Repeat 6-8
on the other side.

10



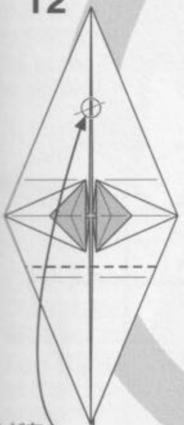
○の
ところで
折り筋をつける
Fold at the
circled point
and unfold.

11



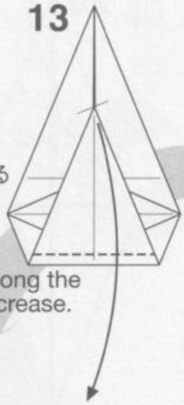
カドと
カドを合わせて
印をつける
Fold corner
to corner, but
only mark at
the center line.

12



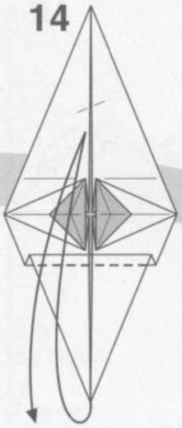
カドを
つけた印に
合わせて折る
Fold the corner
to the circled
point.

13



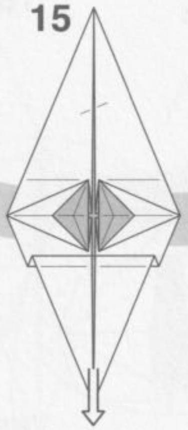
ついている
折り筋で
下へ折る
Fold the
corner along the
existing crease.

14



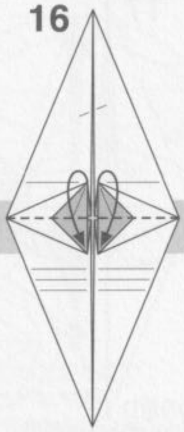
後ろのフチのところで
折り筋をつける
Fold and unfold
along the edge.

15

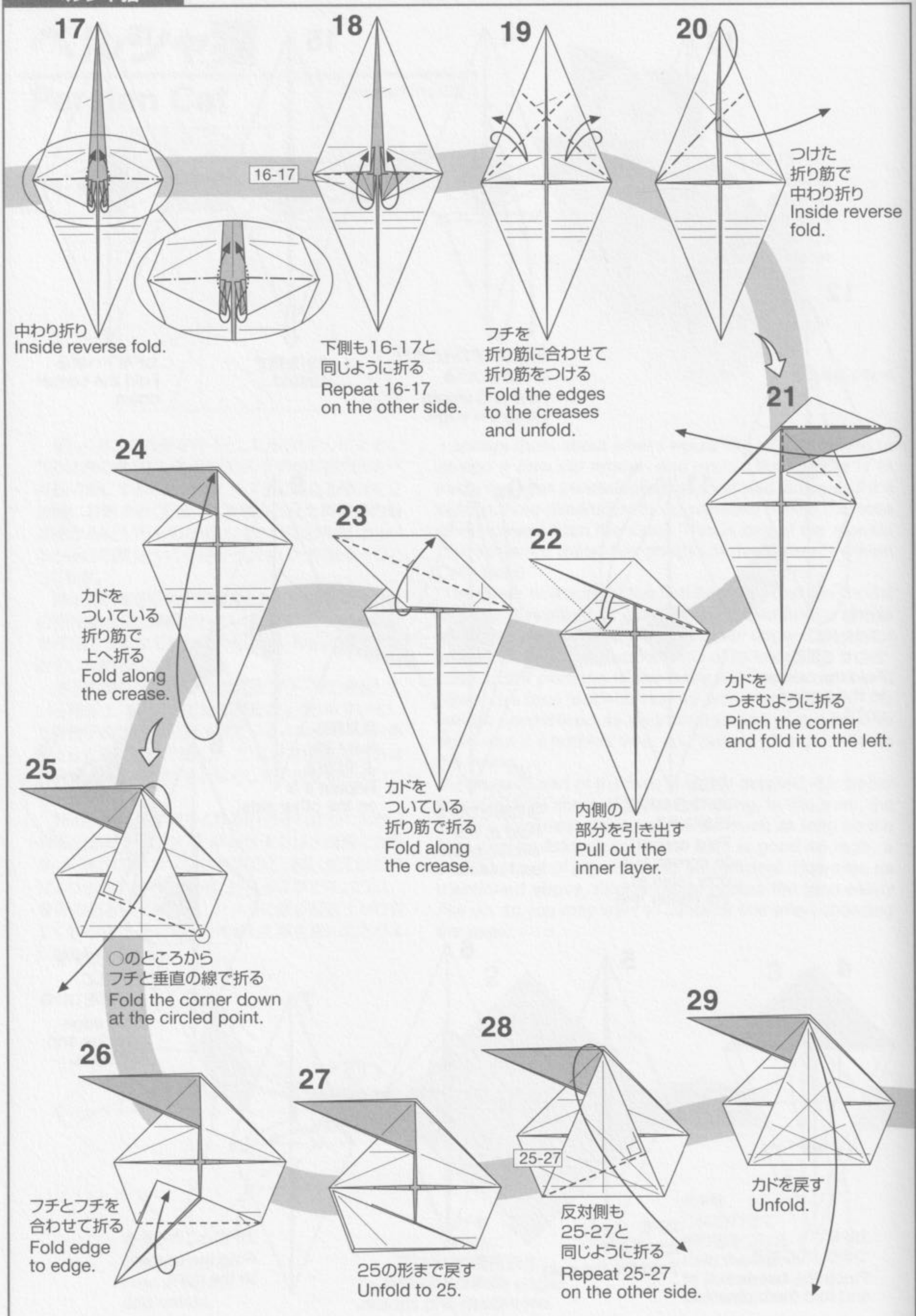


カドを戻す
Unfold.

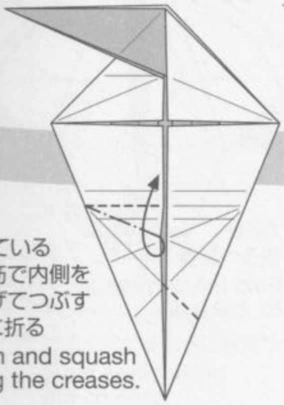
16



カドを下へ折る
Fold the corner
down.

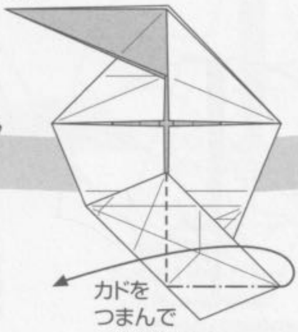

17
中わり折り
Inside reverse fold.
18
16-17
下側も16-17と
同じように折る
Repeat 16-17
on the other side.
19
フチを
折り筋に合わせて
折り筋をつける
Fold the edges
to the creases
and unfold.
20
つけた
折り筋で
中わり折り
Inside reverse
fold.
21
カドを
つまむように折る
Pinch the corner
and fold it to the left.
22
内側の
部分を引き出す
Pull out the
inner layer.
23
カドを
ついている
折り筋で折る
Fold along
the crease.
24
カドを
ついている
折り筋で
上へ折る
Fold along
the crease.
25
○のところから
フチと垂直の線で折る
Fold the corner down
at the circled point.
26
フチとフチを
合わせて折る
Fold edge
to edge.
27
25の形まで戻す
Unfold to 25.
28
25-27
反対側も
25-27と
同じように折る
Repeat 25-27
on the other side.
29
カドを戻す
Unfold.

30



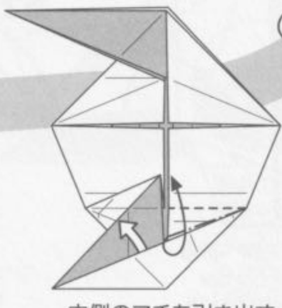
ついている
折り筋で内側を
ひろげてつぶす
ように折る
Open and squash
using the creases.

31



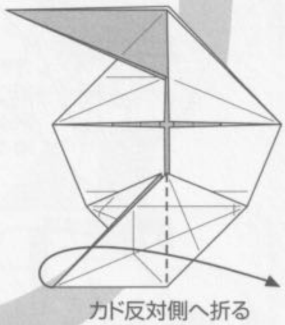
カドを
つまんで
反対側へ折る
Pinch the corner
and fold it to the left.

32



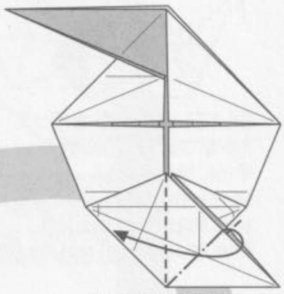
内側のフチを引き出す
Pull out the inner layer

33



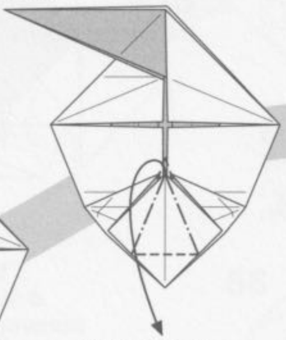
カド反対側へ折る
Fold the flap
to the right.

34



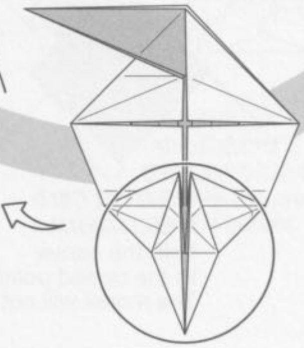
内側をひろげて
つぶすように折る
Open and squash.

35

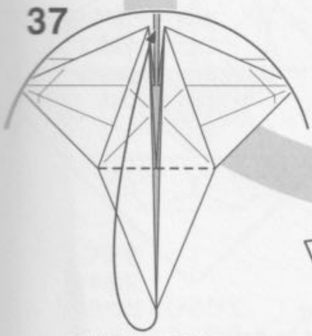


内側をひろげて
つぶすように折る
Petal fold.

36

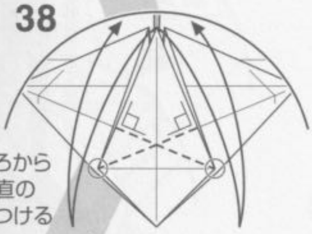


37



カドを上へ折る
Fold the corner up.

38



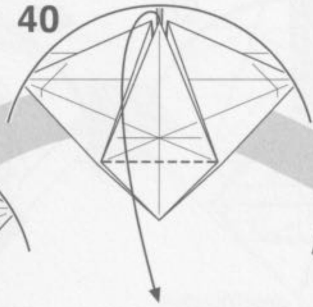
○のところから
フチに垂直の
折り筋をつける
Fold the corner down
at the circled point
and unfold.

39



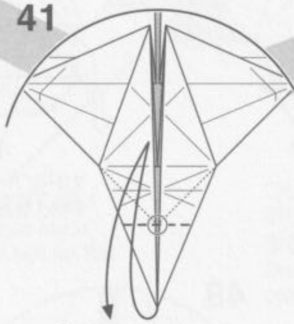
○のところで
下へ折って
折り筋をつける
Fold at the circled point
and unfold.

40



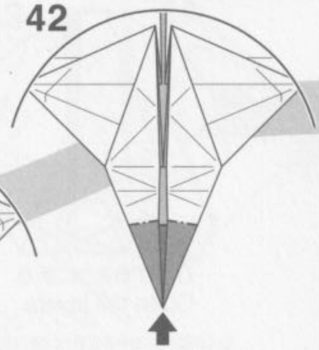
カドを下へ折る
Fold the flap down.

41



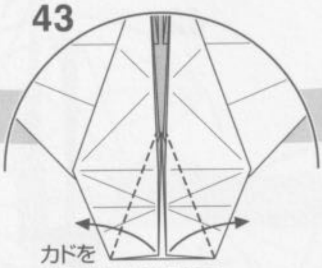
後ろのカドのところで
折り筋をつける
Fold at the circled point
and unfold.

42



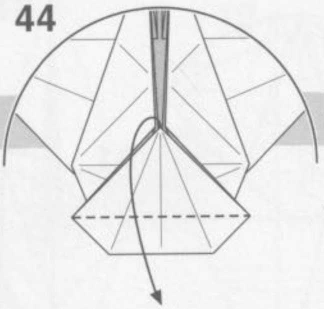
つけた折り筋で
カドを内側に
沈めるように折る
Open sink
along the creases.

43



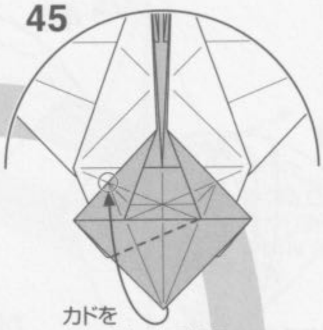
カドを
ひろげるように折る
Open the layers.

44



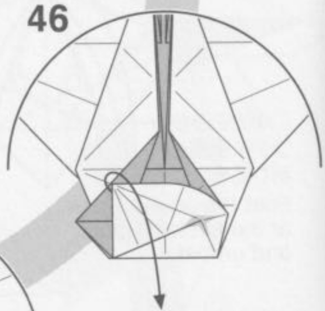
カドを下へ折る
Fold the corner down.

45



カドを
○に合わせて折る
平らにはならない
Fold the corner
to the circled point.
The model will not
lie flat.

46



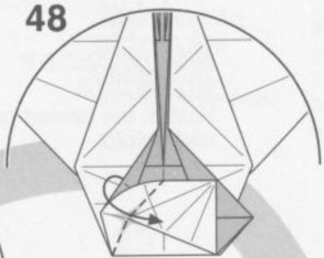
しっかりと折り筋を
つけてから戻す
Firmly crease
and unfold.

47



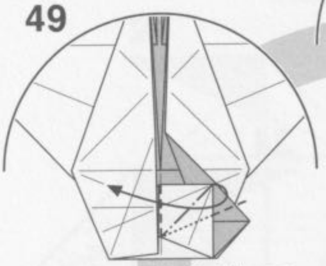
カドを
○に合わせて折る
平らにはならない
Fold the corner
to the circled point.
The model will not lie flat.

48



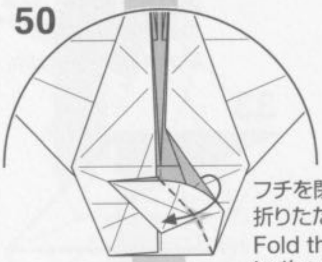
フチを閉じるように
折りたたむ
Fold the edge to
the center line.

49



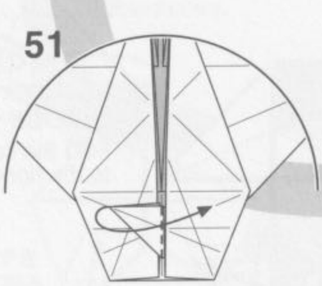
ついている折り筋を使って
カドをつまむように折る
平らにはならない
Pinch the corner
and fold it to the left.
The model will not lie flat.

50



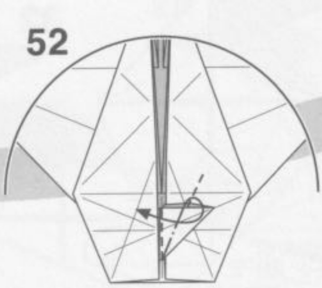
フチを閉じるように
折りたたむ
Fold the edge
to the center line.

51



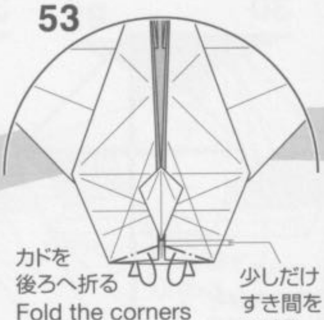
カドを反対側へ折る
Fold the corner
to the other side.

52



内側をひろげて
つぶすように折る
Open and squash.

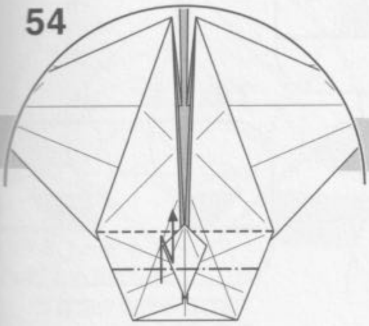
53



カドを
後ろへ折る
Fold the corners
to behind.

少しだけ
すき間を
あける
Leave a
little space
here.

54



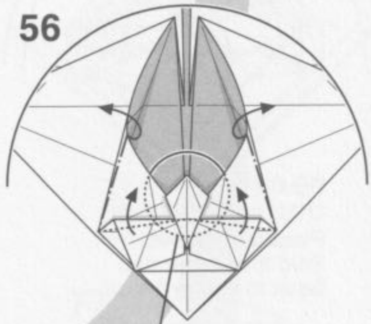
ついている折り筋で
かるく起こすように段折り
Pleat softly using
the creases.

55

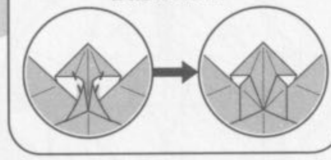


○を結ぶ線で
手前の1枚をひろげて
つぶすように折る
Open the layers along
the line connecting
the circled points.

56

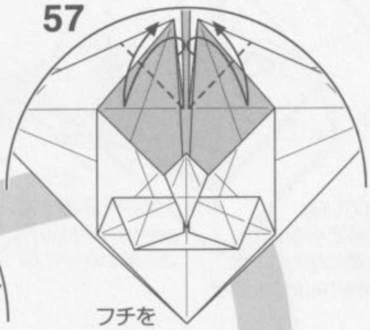


裏から見た図
Back view.



途中の図
裏側を図のようにつぶしながら
ついている折り筋で折りたたむ
In progress.
Fold the raised layers
using the existing creases

57



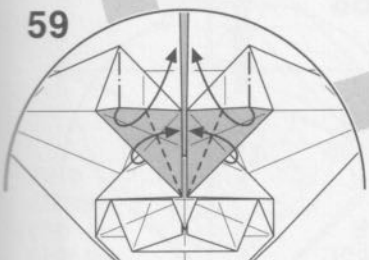
フチを
折り筋に合わせて
折り筋をつける
Fold the edge to the
crease and unfold.

58



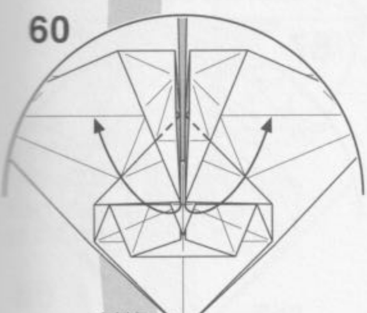
折り筋を
中心に合わせて
ずらすように折る
Swivel the creases
to the center.

59



フチを
中心に
合わせてひろげて
つぶすように折る
Open and squash.

60



カドを
反対側へ折る
Fold the flaps up.

61



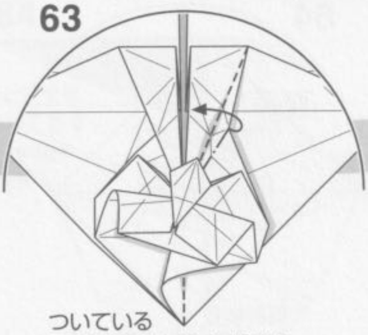
カドを
内側に
折り込む
Fold the corner inside.

62



内側の部分を
引き出す平らにはならない
Pull out the inner layer.
The model will not lie flat.

63



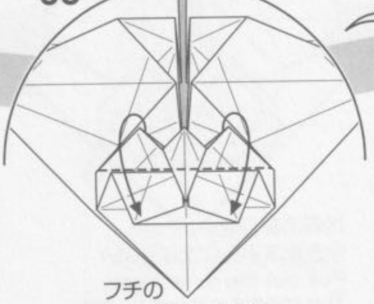
ついている
折り筋で引き出した部分を
手前に折りたたむ
Swivel the raised layer
using the existing creases.

64



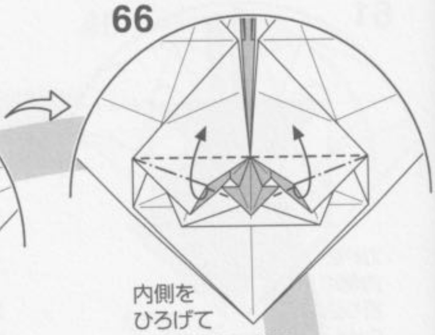
反対側も
62-63と同じように折る
Repeat 62-63 on the other side.

65



フチの
ところで下へ折る
Fold the corners down.

66



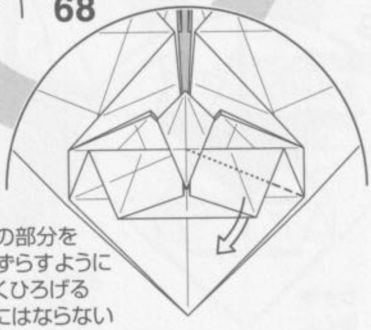
内側を
ひろげて
つぶすように折る
Open and squash.

67



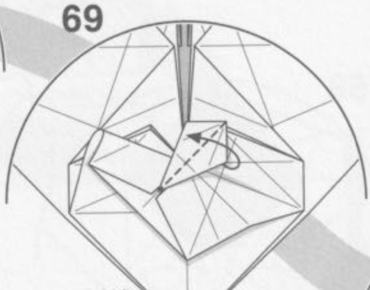
カドを
上へ折る
Fold the flaps up.

68



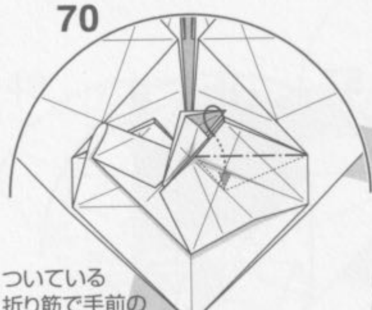
手前の部分を
下へずらすように
かるくひろげる
平らにはならない
Stretch the layer.
The model will not lie flat.

69



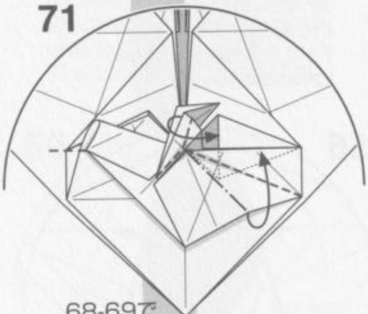
カドを
反対側へ
かるくひろげる
Fold the flap up.

70



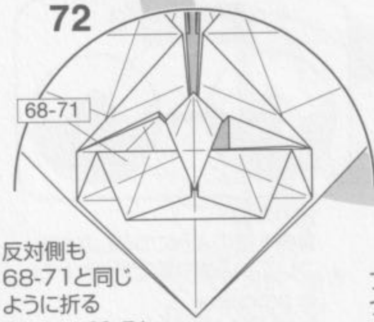
ついている
折り筋で手前の
すき間に中わり折り
Inside reverse fold.

71



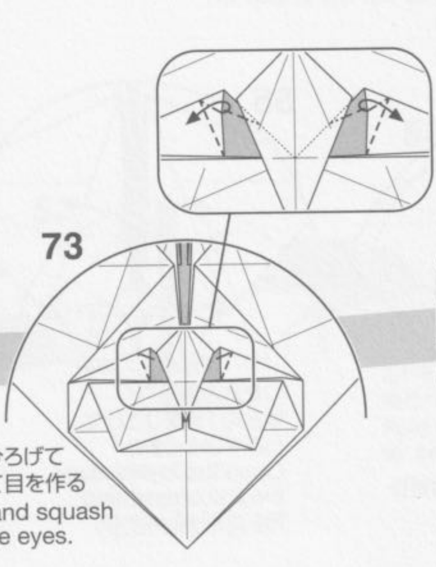
68-69で
ひろげた部分を戻す
Pleat and swivel.
Fold the center flap back to where it was.

72



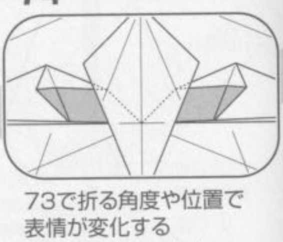
反対側も
68-71と同じ
ように折る
Repeat 68-71 on the other side.

73



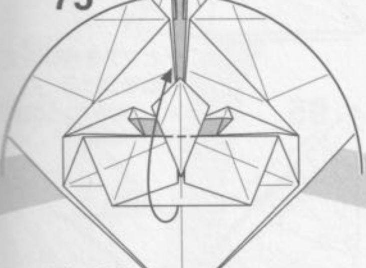
フチをひろげて
つぶして目を作る
Open and squash to make eyes.

74



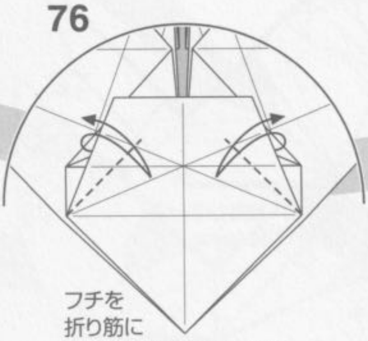
73で折る角度や位置で
表情が変化する
The angle and degree of folds in 73 changes the look of the face.

75



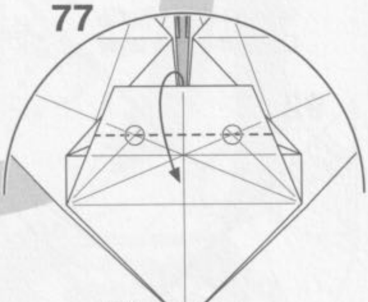
フチを上へ折る
Fold the flap up.

76



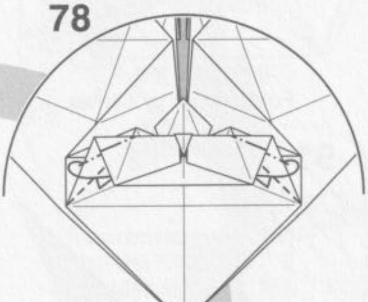
フチを
折り筋に
合わせて折り筋をつける
Fold the edges to the creases and unfold.

77



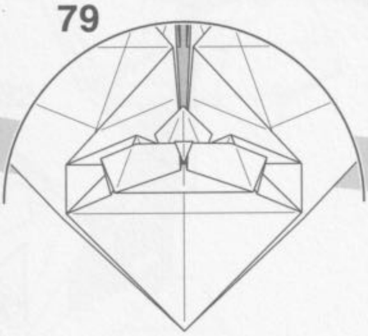
○を
結ぶ線で下へ折る
Fold along the line connecting the circled points.

78

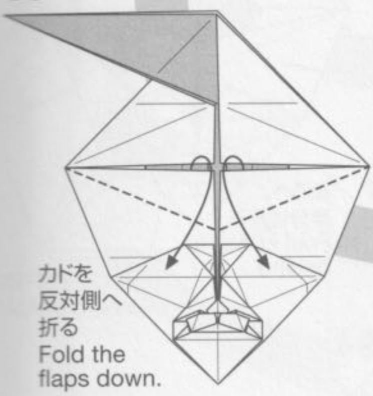


フチを
内側に折り込む
Swivel the edges.

79

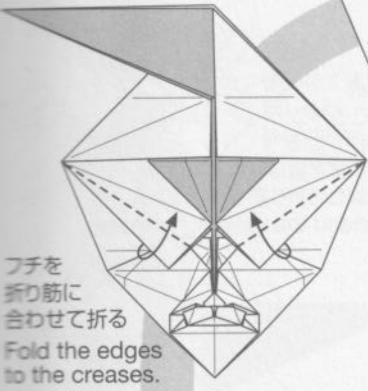


80



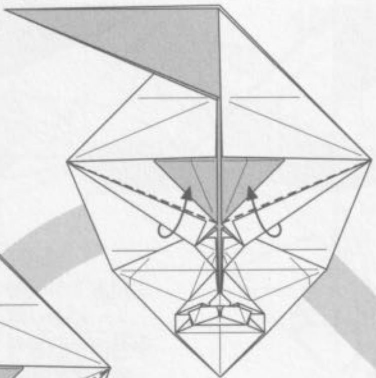
カドを
反対側へ
折る
Fold the flaps down.

81



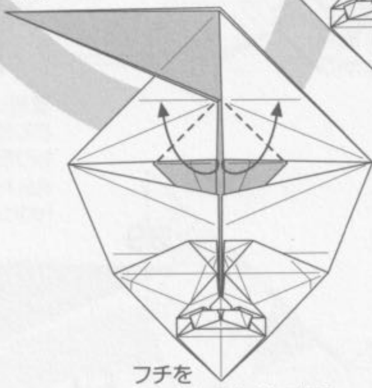
フチを
折り筋に
合わせて折る
Fold the edges to the creases.

82



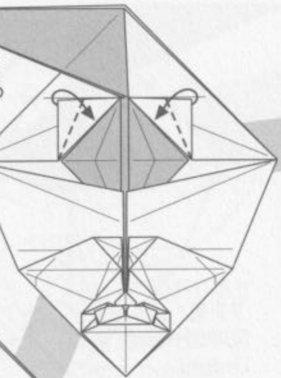
ついている
折り筋で折る
Fold the flaps up.

83



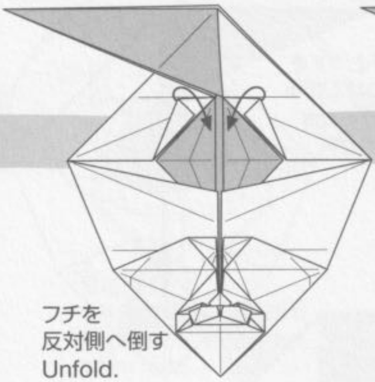
フチを
折り筋に合わせて折る
Fold the edges to the creases.

84



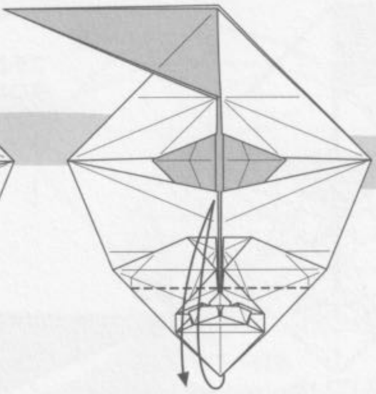
フチとフチを
合わせて折る
Fold edge to edge.

85



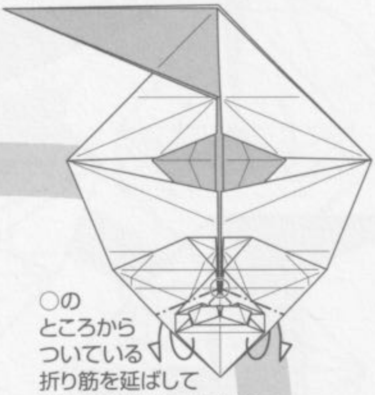
フチを
反対側へ倒す
Unfold.

86



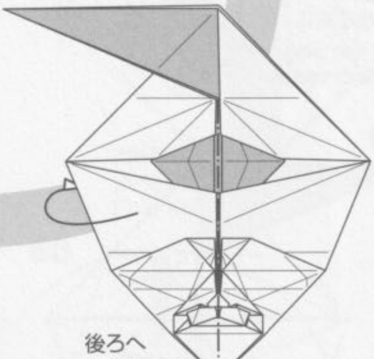
裏側についている
折り筋で折って
折り筋をつけ直す
Re-fold along the
hidden crease.

87



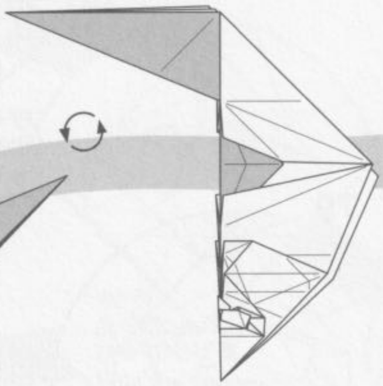
○の
ところから
ついている
折り筋を延ばして
山折りの折り筋をつける
Extend the existing creases.

88

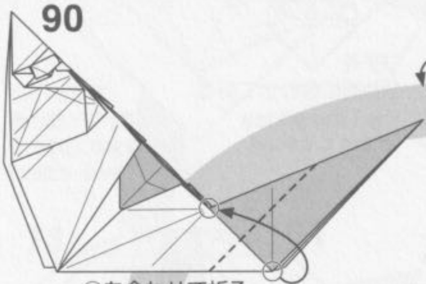


後ろへ
半分に折る
Fold in half to
behind.

89

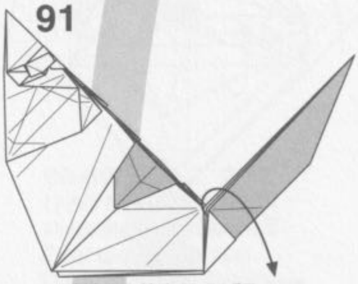


90



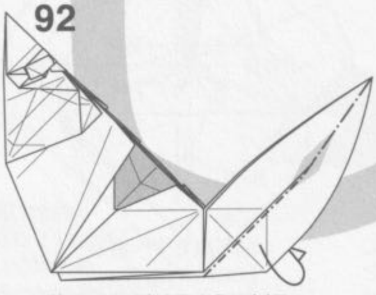
○を合わせて折る
Fold corner to corner.

91



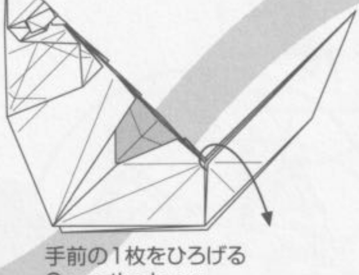
手前の1枚をひろげる
Open the first layer.

92



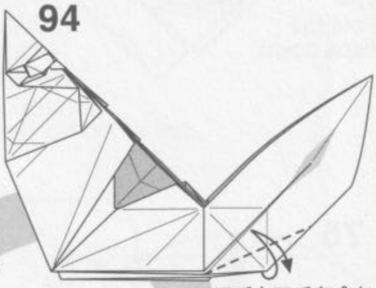
後ろへかぶせるように折る
Fold the edge to behind.

93



手前の1枚をひろげる
Open the layer.

94



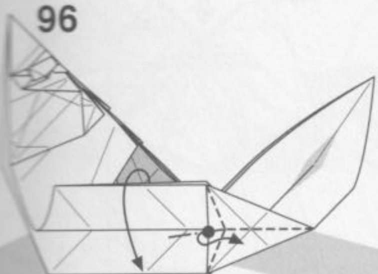
フチとフチを合わせて
折り筋をつける
Fold edge to edge
and unfold.

95



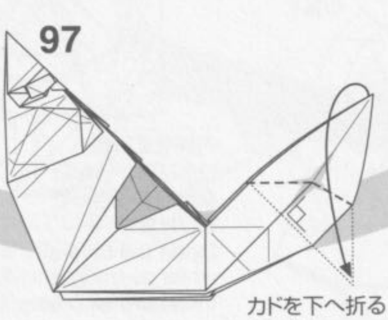
つけた折り筋を使って
カドをひろげてつぶすように折る
Spread sink.

96



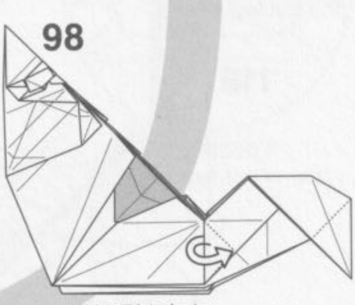
●のフチを中わり折りのように
折りながら閉じるように折る
Close the layer
while inside reverse folding
the dotted edge.

97



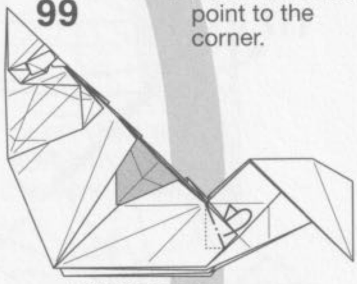
カドを下へ折る
Fold the corner
down.

98



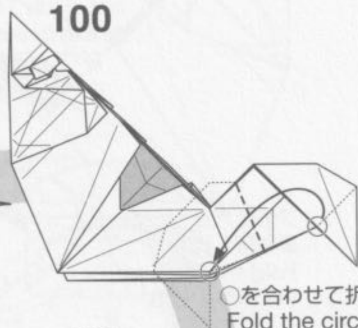
カドを引き出す
反対側も同じように折る
Pull out the inner layer.
Repeat on the other side.

99



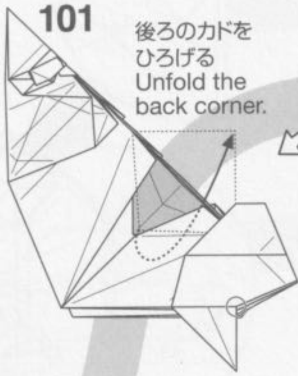
カドを後ろへ折る
反対側も同じように折る
Fold the corner to behind.
Repeat on the other side.

100



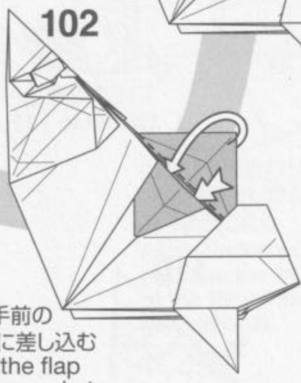
○を合わせて折る
Fold the circled
point to the
corner.

101



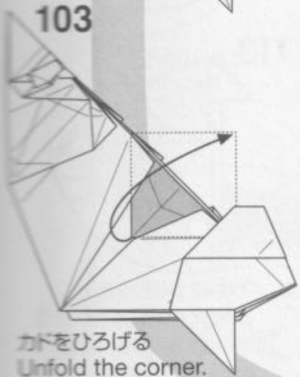
後ろのカドを
ひろげる
Unfold the
back corner.

102



カドを手前の
すき間に差し込む
Insert the flap
into the pocket.

103



カドをひろげる
Unfold the corner.

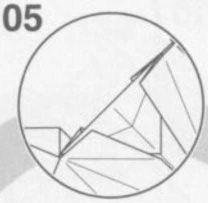
104



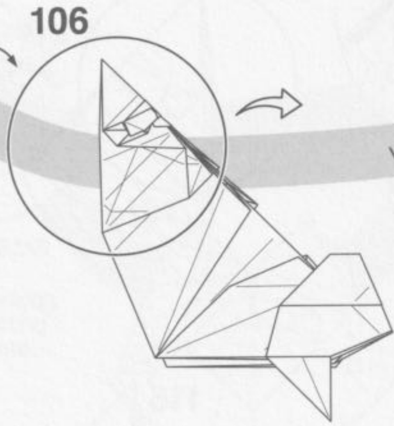
裏から見た図
Back view.

カドを
後ろのすき間に
差し込む
Insert the flap
into the slit.

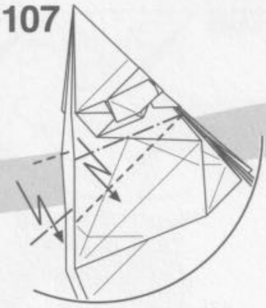
105



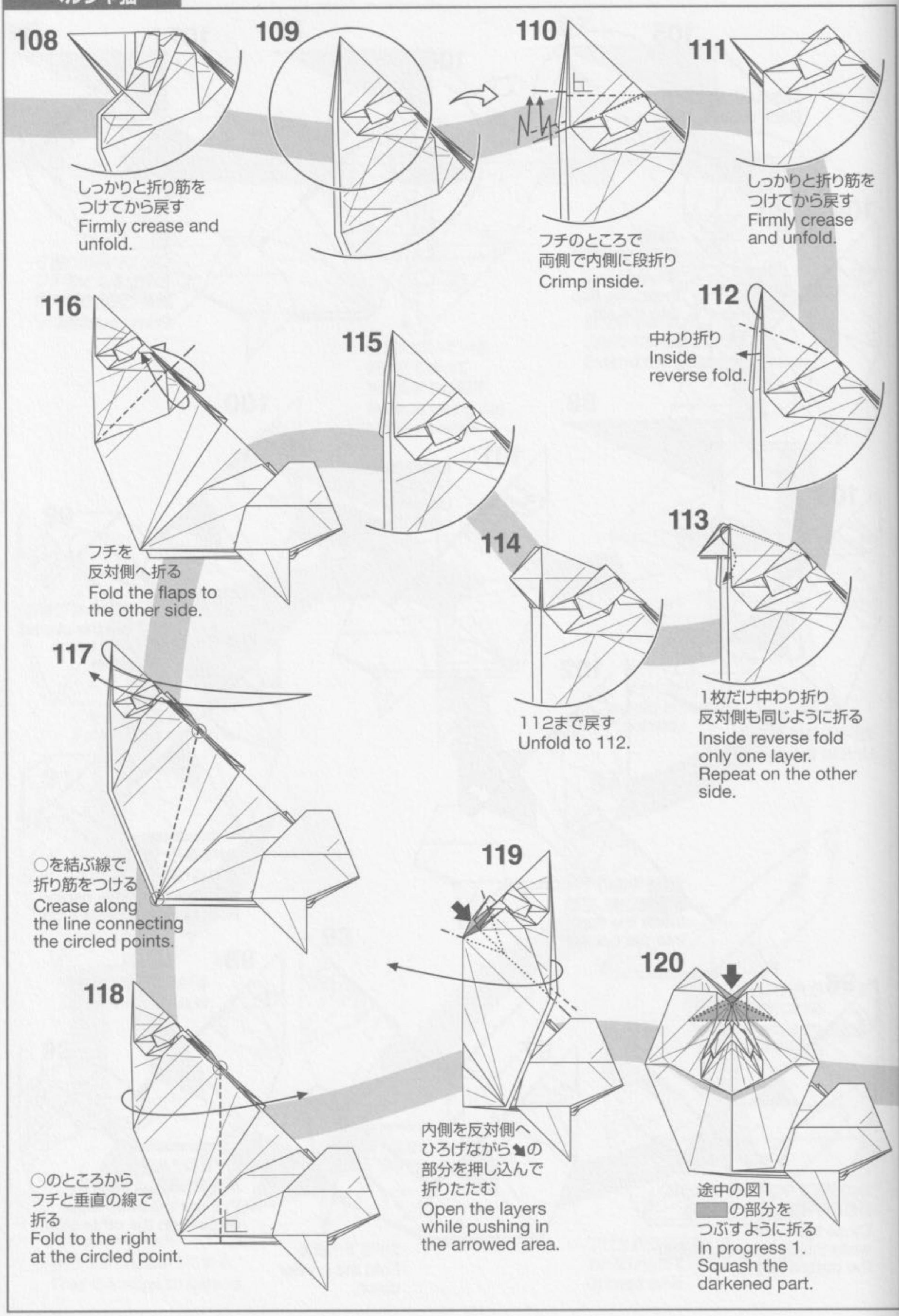
106



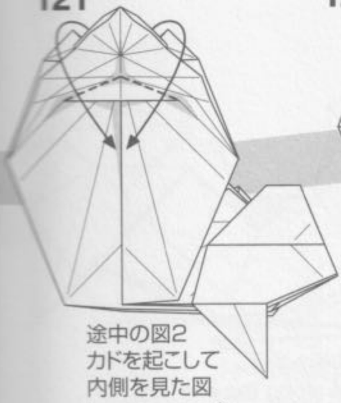
107



ついている折り筋で
かぶせるように
両側で段折り
Crimp outside.

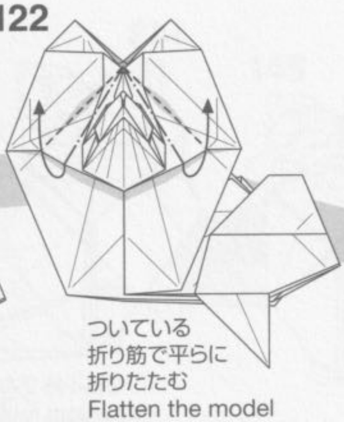

108
しっかりと折り筋を
つけてから戻す
Firmly crease and
unfold.
109
110
フチのところで
両側で内側に段折り
Crimp inside.
111
しっかりと折り筋を
つけてから戻す
Firmly crease
and unfold.
112
中わり折り
Inside
reverse fold.
113
1枚だけ中わり折り
反対側も同じように折る
Inside reverse fold
only one layer.
Repeat on the other
side.
114
112まで戻す
Unfold to 112.
115
116
フチを
反対側へ折る
Fold the flaps to
the other side.
117
○を結ぶ線で
折り筋をつける
Crease along
the line connecting
the circled points.
118
○のところから
フチと垂直の線で
折る
Fold to the right
at the circled point.
119
内側を反対側へ
ひろげながら➘の
部分を押し込んで
折りたたむ
Open the layers
while pushing in
the arrowed area.
120
途中の図1
■の部分を
つぶすように折る
In progress 1.
Squash the
darkened part.

121



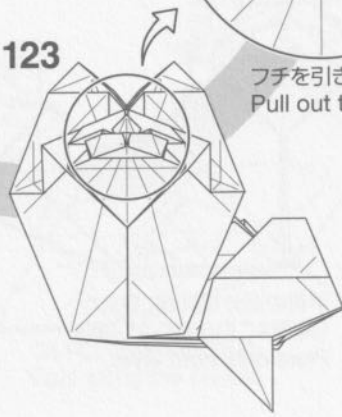
途中の図2
カドを起こして
内側を見た図
In progress 2.
Inside view.

122

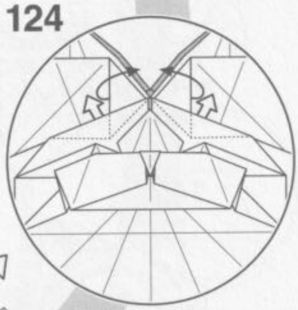


ついている
折り筋で平らに
折りたたむ
Flatten the model
using the existing
creases.

123

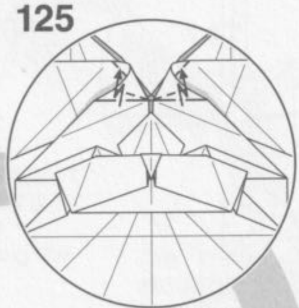


124



フチを引き出す
Pull out the layers.

125



ついている折り筋を
山折りにして段折り
Pleat and flatten.

126



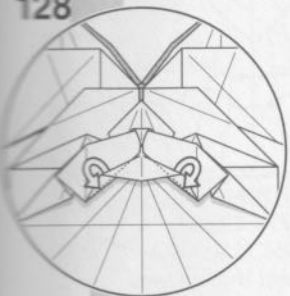
○のフチを合わせて
手前の部分が立体に
なるように折る
Align circled points
to make the front
of the face three
dimensional.

127



フチの
ところで斜めに段折り
Pleat along the edges.

128

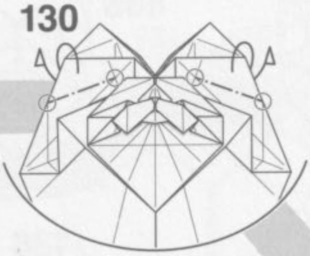


後ろのフチを手前に出す
Pull out the hidden
layers to the top.

129

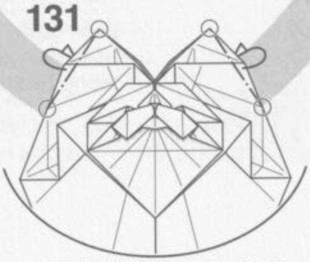


130



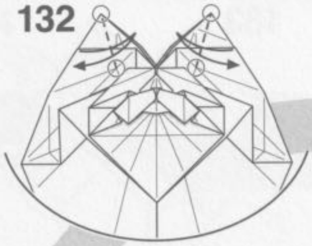
○を結ぶ線で山折りの
折り筋をつける
Mountain fold along
the line connecting
the circled points
and unfold.

131



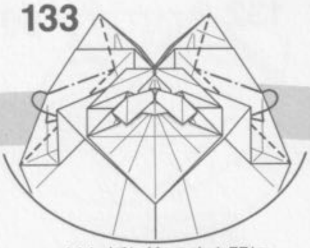
○を結ぶ線で後ろへ折る
Fold to behind along
the line connecting
the circled points.

132



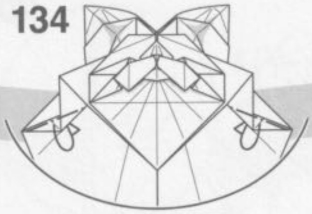
○を結ぶ線で
折り筋をつける
Crease along the
line connecting the
circled points.

133



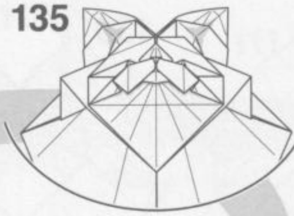
つけた折り筋ですき間に
引き寄せるように折る
耳が立体になる
Swivel using the creases
to make the ears 3-D.

134

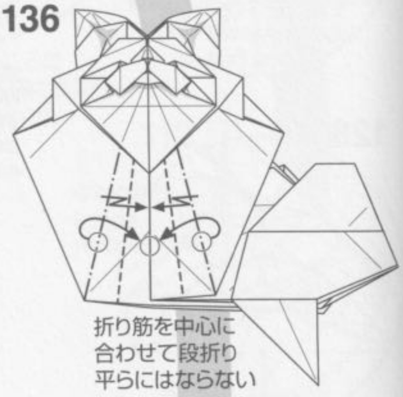


フチのところで
後ろへ折る
Mountain fold
along the edges.

135

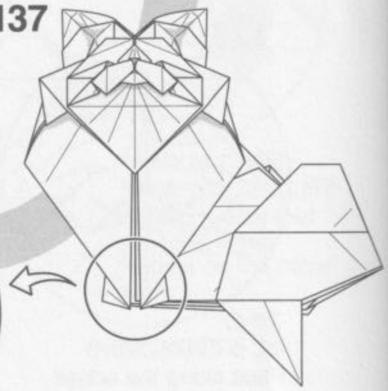


136

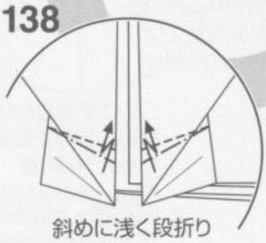


折り筋を中心に
合わせて段折り
平らにはならない
Pleat the creases
to the center line.
The model will not
lie flat.

137

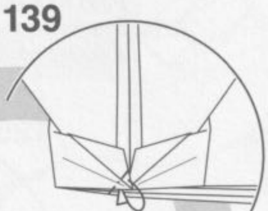


138



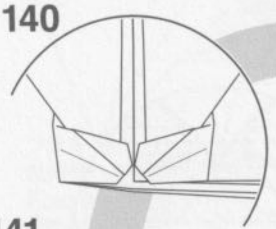
斜めに浅く段折り
Pleat.

139

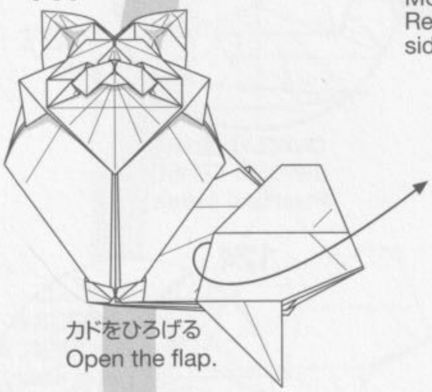


カドを後ろへ折る
反対側も同じように折る
Mountain fold the tip.
Repeat on the other
side.

140

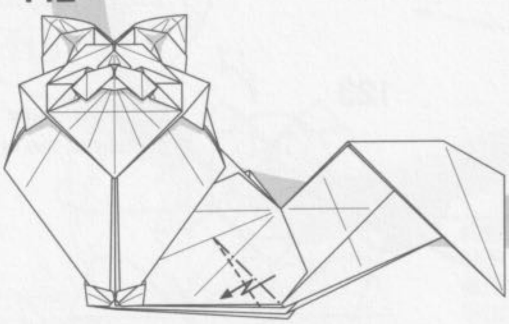


141



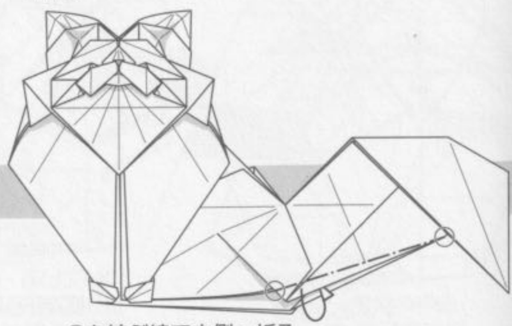
カドをひろげる
Open the flap.

142



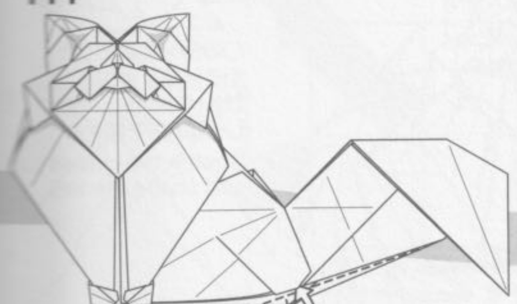
手前の部分を斜めに段折り
(奥側はこの段折りはしない)
Pleat only front layer.

143



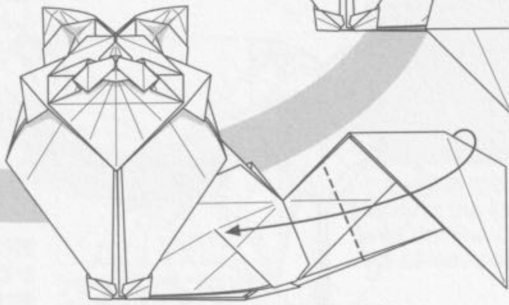
○を結ぶ線で内側へ折る
Mountain fold along the line
connecting the circled points

144



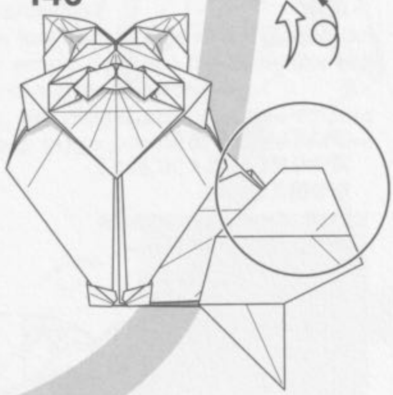
奥側の
フチも内側に折る
Fold along the edge.

145

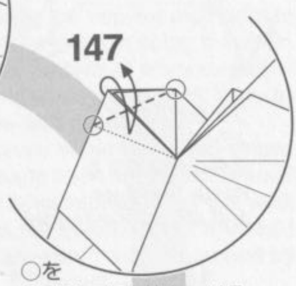


ついている折り筋で折る
Fold along the crease.

146

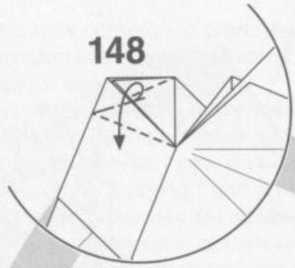


147



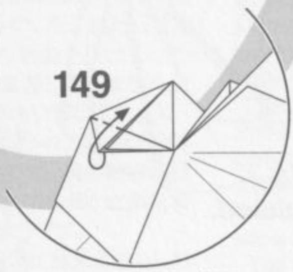
○を
結ぶ線で折り筋をつける
Crease along the line connecting the circled points.

148



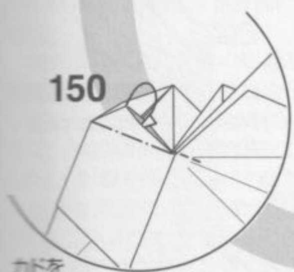
つけた折り筋を使って
ひろげてつぶすように
折る
Squash using the crease.

149



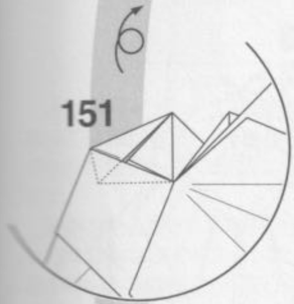
カドを反対側へ折る
Fold the flap up.

150

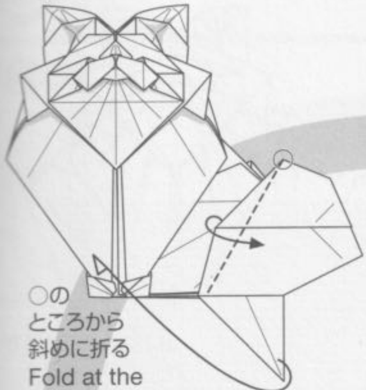


カドを
すき間に折り込む
Fold the corner to inside.

151

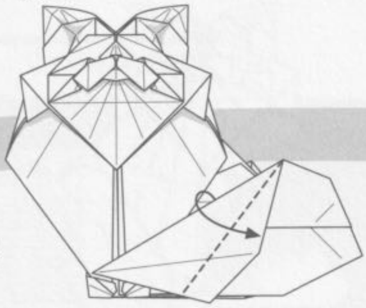


152



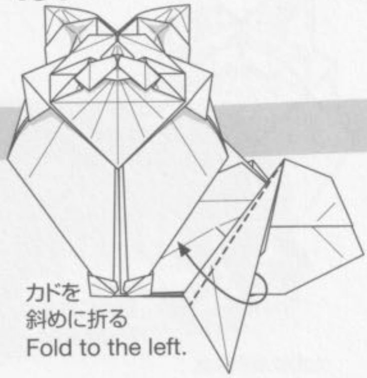
○の
ところから
斜めに折る
Fold at the circled point.

153



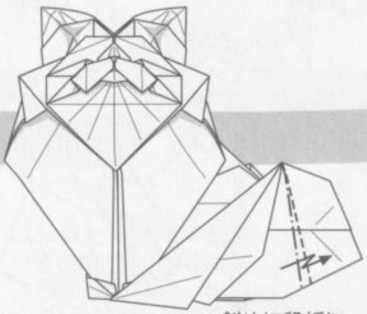
フチとフチを合わせて折る
Fold edge to edge.

154



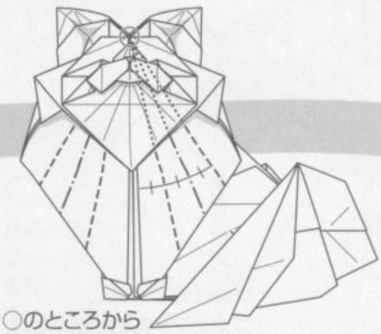
カドを
斜めに折る
Fold to the left.

155



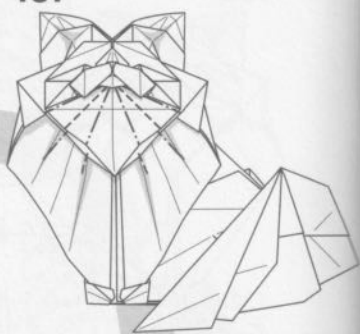
斜めに段折り
Pleat fold.

156



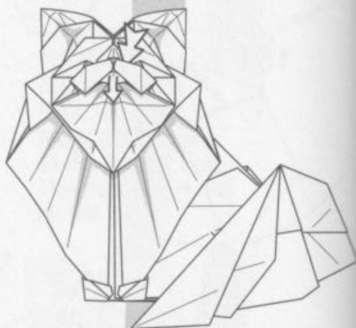
○のところから
1/3の角度で斜めに蛇腹の
折り筋をつけて形を整える
Make creases at 1/3
of the angles.

157



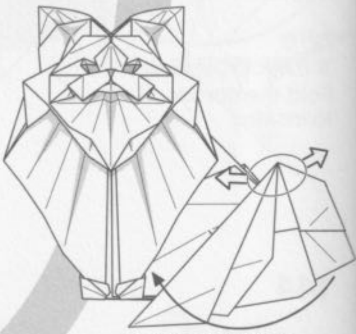
ついている折り筋で
首元の形を整える
Shape using the
creases.

158



口周りの部分をかるく起こす
Make the muzzle part
three dimensional.

159



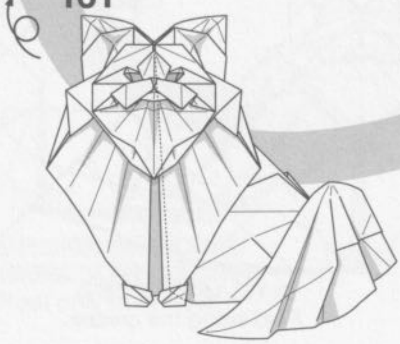
○の部分の段折りを
引き伸ばすように
ひろげながら
しっぽの形を整える
Stretch the circled part
and shape the tail.

160

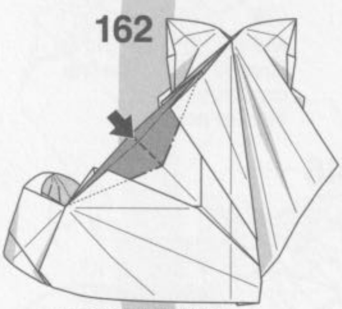


奥のフチを
かるく後ろへ
曲げるように折る
Make a mountain crease
on the hidden layer.

161

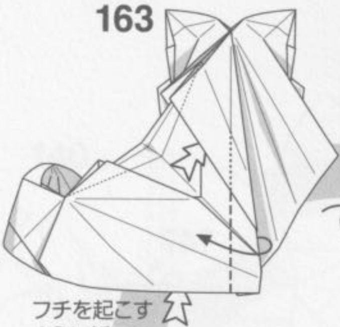


162



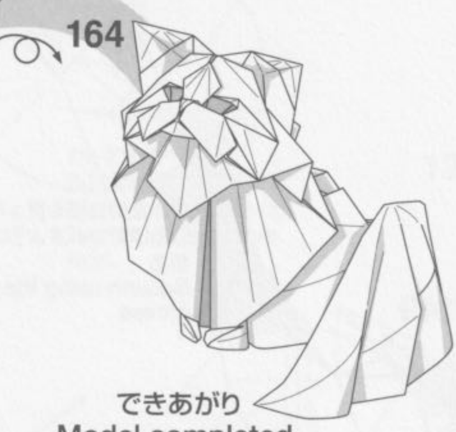
ついている折り筋で
背中を押し込むように折って
形を整える
Push the darkened area
along the creases.

163



フチを起こす
ように折って
全体の形を整える
Raise the layer
and shape the model.

164

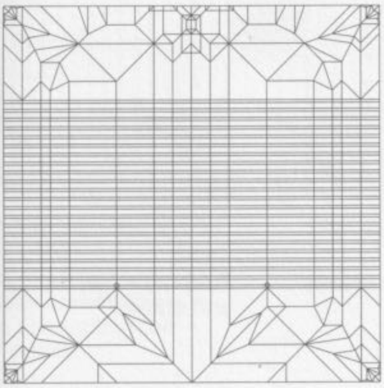


できあがり
Model completed.

トラ

Tiger

Created in 2022





推奨用紙 60cm

インサイドアウトで縞模様を出すのが一般的になっている昨今、「トラ」をどのように表現するかは、折り紙作家の一つの課題になりつつあるように思います。

私自身もありきたりな手法では面白くなく、自分がやる意味もないと考えていたのですが、あるとき、木彫りのトラの縞模様が「彫り」によって表現されているのを見て、縞を凹みで表現できないかと思いつきました。

蛇腹構造による背骨の曲線と縞模様の表現は、北條高史氏の「虎」によって1998年に既に試みられていました。この作品には当時から感銘を受けていたので、作品を作り始めた当初は意識していませんでしたが、影響を受けていたのは間違いないでしょう。

蛇腹は基本20等分。顔の細部が40または80等分、縞の段折りは128等分の幅です。縞の数は段折りの幅で任意に変更できますが、あまり細いと縞を表現できなくなるので限度はあるようです。

展開図を見ると一見複雑な構造に見えるかもしれませんが、実際の所は最大まで単純にすると伝承作品の「ぶた」なので、構造的にはシンプルであると言えるかもしれません。

前述の通り細かい蛇腹を含むため、大きめの紙を用意して挑戦してみてください。

As it is now common to produce stripes by color change, the expression of a tiger is becoming one of the most challenging issues for origami artists.

I myself used to think that adopting the popular method was uninteresting and that there was no point in doing it myself. One day, however, I saw a stripe pattern of a wooden tiger expressed by "carving," and it triggered me to think it would be possible to express the stripes with concavities.

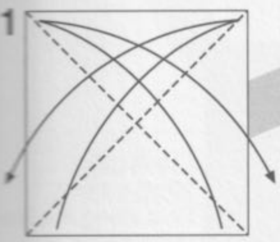
In fact, the expression of the curves of the spine and stripes with a pleated structure had already been attempted in 1998 by Takashi Hojyo's "Tiger." I had been impressed by this work since that time. Although I was not conscious of it when I started designing this model, I am sure I was influenced by Hojyo.

The "bellows" on the body are based on division into the 20ths of the width of the sheet. The details of the face are based on 40ths or 80ths, and the stripes are of the width of 128ths. The number of stripes can be arbitrarily changed, but there seems to be a limit because too-thin stripes do not allow for shaping and expressions.

The crease pattern may look complicated at first glance, but in fact, it is structurally simple because the basic skeletal structure of the model is one of the traditional pig.

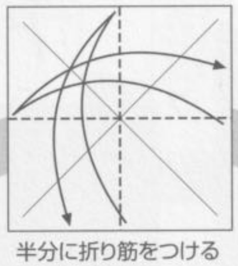
As mentioned above, the model requires fine folding everywhere. Prepare a large piece of paper for the challenge.

1



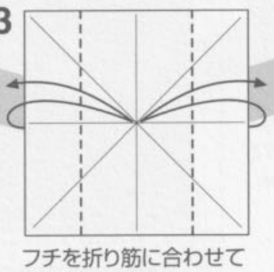
三角に折り筋をつける
Fold in halves and unfold.

2



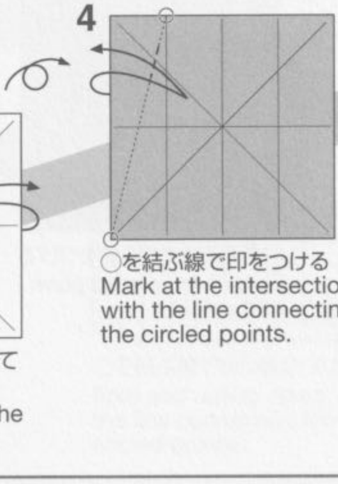
半分に折り筋をつける
Fold in halves and unfold.

3



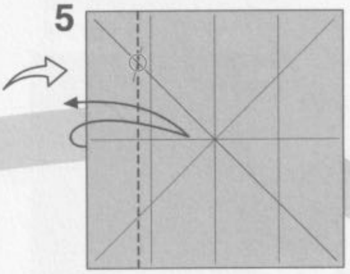
フチを折り筋に合わせて折り筋をつける
Fold the edges to the crease and unfold.

4



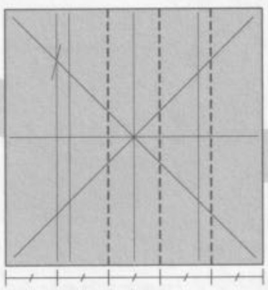
○を結ぶ線で印をつける
Mark at the intersection with the line connecting the circled points.

5



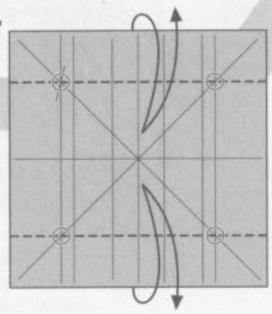
○を通る線で折り筋をつける
Fold at the circled point and unfold.

6



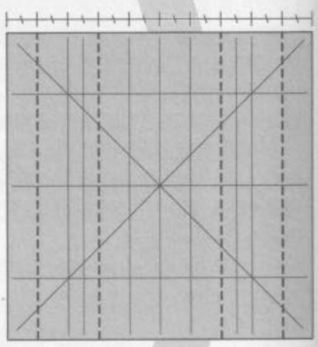
5等分の折り筋をつける
Crease at fifths of the width.

7



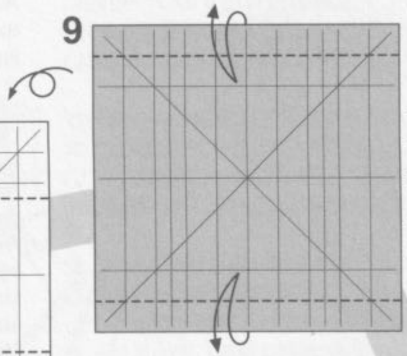
○を通る線で折り筋をつける
Fold along the line connecting the circled points. Unfold.

8



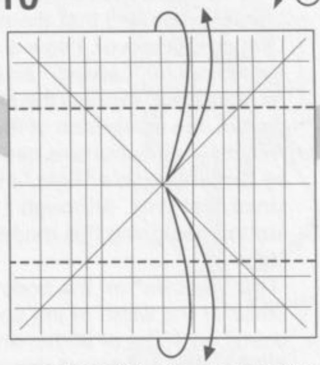
10等分の折り筋をつける
Fold and unfold at half of the width(1/10).

9



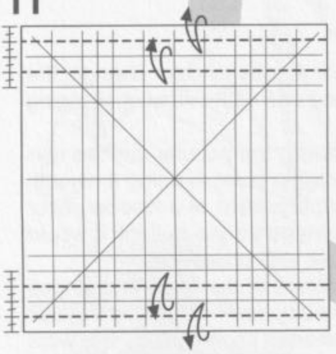
フチを折り筋に合わせて折り筋をつける
Fold the edges to the creases and unfold.

10



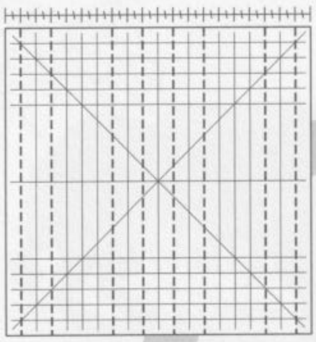
フチを折り筋に合わせて折り筋をつける
Fold the edges to the crease and unfold.

11



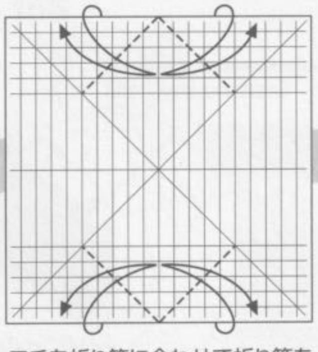
20等分の幅で折り筋をつける
Fold and unfoldat half of the width(1/20).

12



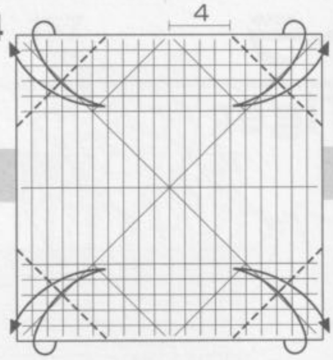
半分の幅で20等分の折り筋をつける
Fold and unfold at half of the width(1/20).

13



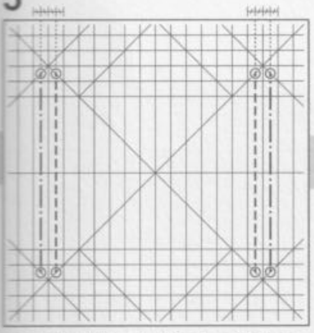
フチを折り筋に合わせて折り筋をつける
Fold the edges to the crease and unfold.

14



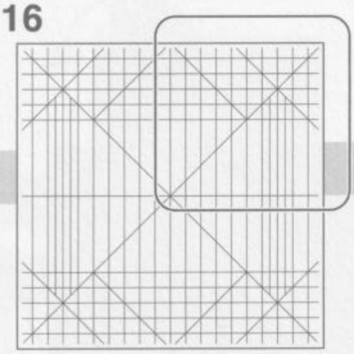
フチを折り筋に合わせて折り筋をつける
Fold the edges to the creases and unfold.

15

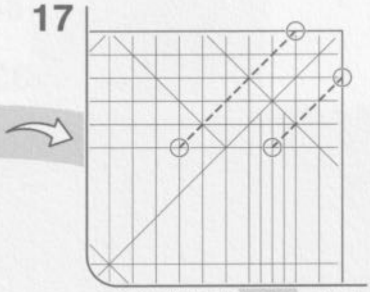


○を結ぶ線で山折りと谷折りの折り筋をつける
Make a mountain crease and valley crease along the line connecting the circled points.

16

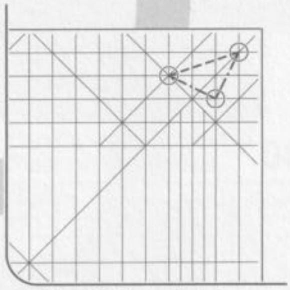


17



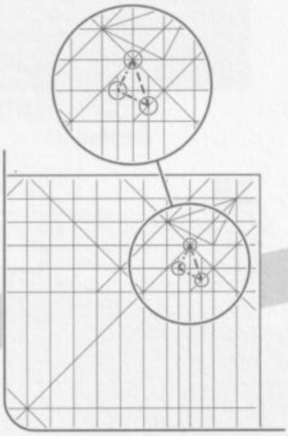
○を結ぶ線で折り筋をつける
Fold and unfold along the lines connecting the circled points.

18



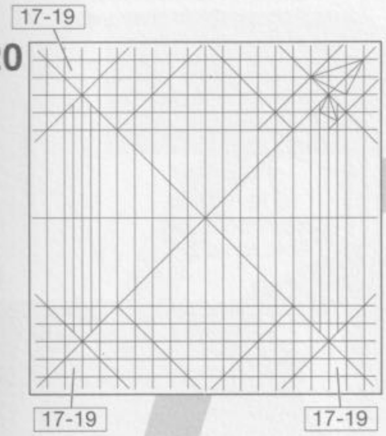
○を結ぶ線で山折りと谷折りの折り筋をつける
Fold and unfold along the lines connecting the circled points.

19



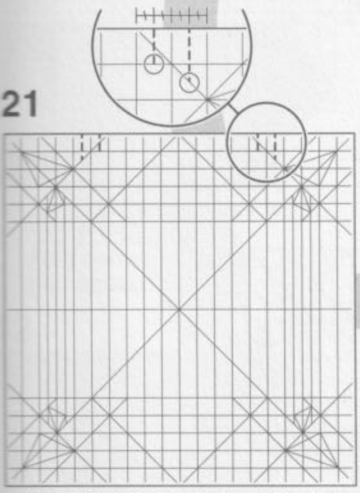
○を結ぶ線で山折りと谷折りの折り筋をつける
Fold and unfold along the lines connecting the circled points.

20



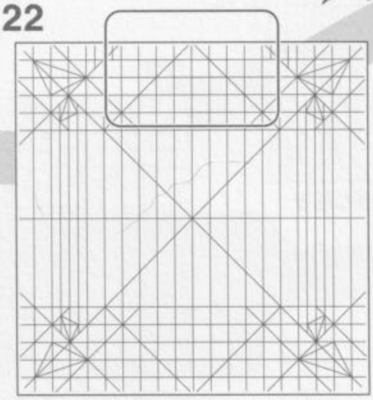
残り3か所も17-19と同じように折り筋をつける
Repeat 17-19.

21

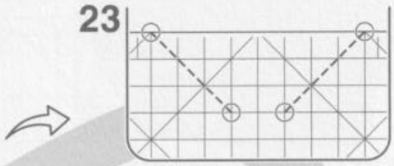


半分の幅で○のところまで折り筋をつける
Fold and unfold at half of the width.

22

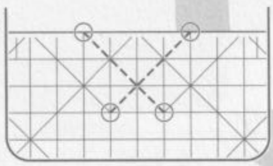


23



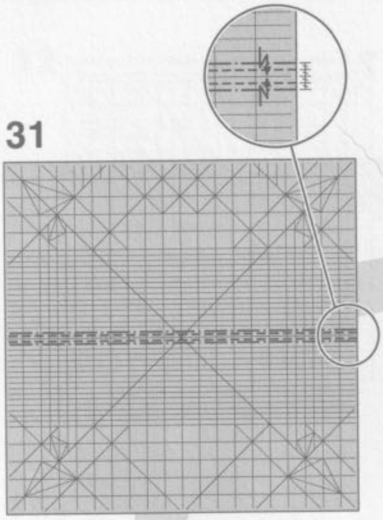
○を結ぶ線で折り筋をつける
Fold and unfold along the line connecting the circled points.

24



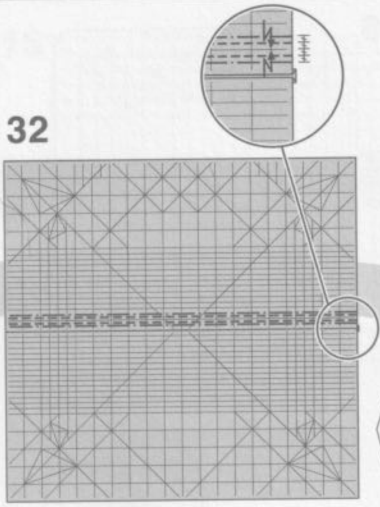
○を結ぶ線で折り筋をつける
Fold and unfold along the line connecting the circled points.

31



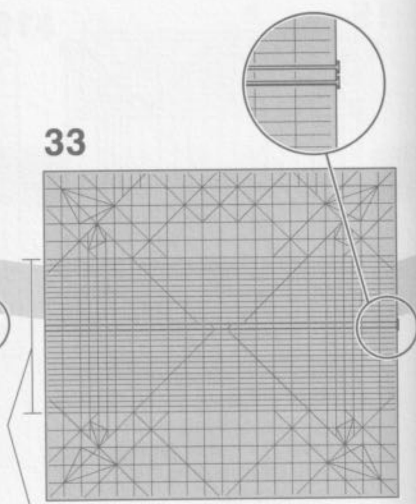
更に半分の幅で段折り
Pleat fold at half
of the width.

32



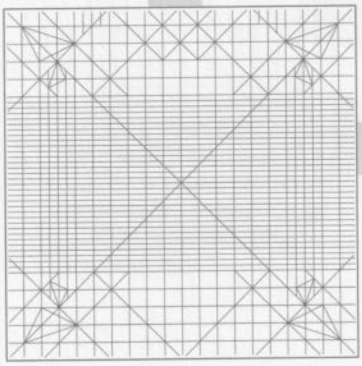
同じように段折り
Repeat 31.

33

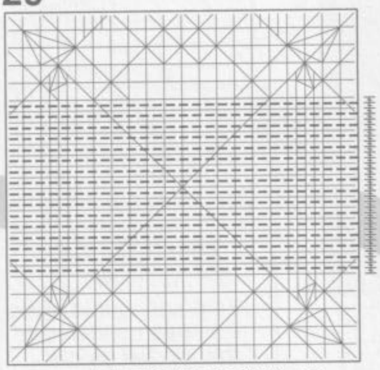


32等分をした中央の部分で
残りも31と同じように段折り
Repeat 31 in this area.

30

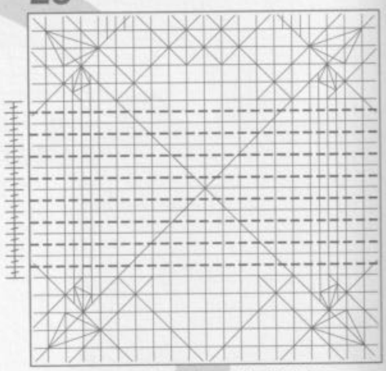


29



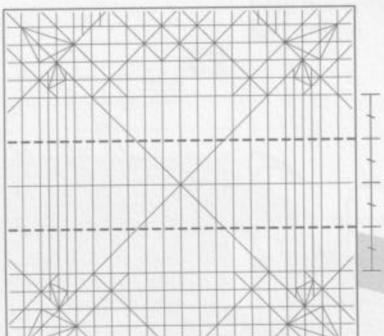
中央の部分を32等分する
折り筋をつける
Fold and unfold at half
of the width(1/32).

28



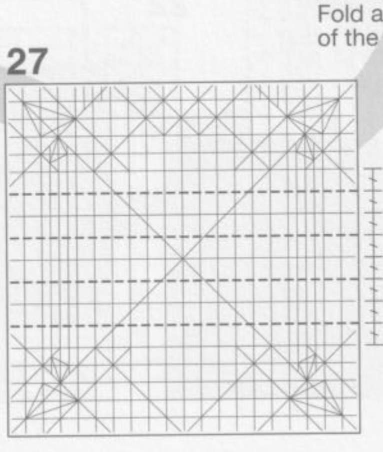
中央の部分を16等分する
折り筋をつける
Fold and unfold at half
of the width(1/16).

26



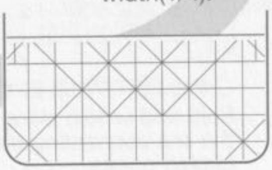
中央の部分を4等分する折り筋を
つける
Fold and unfold at half of the
width(1/4).

27

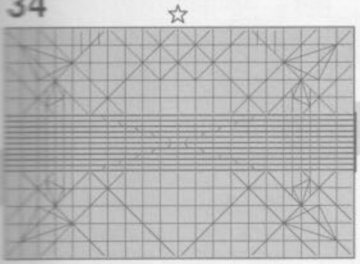


中央の部分を
8等分する
折り筋をつける
Fold and unfold
at half of the
width(1/8).

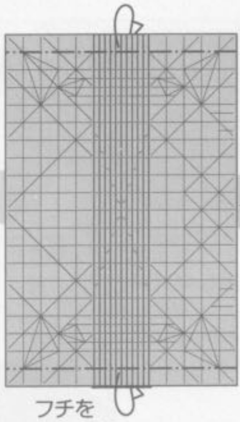
25



34

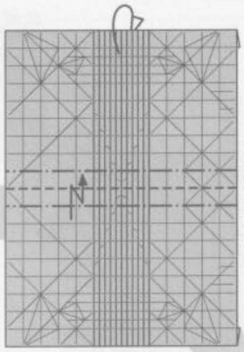


35



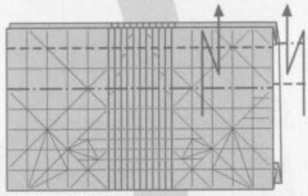
フチを
後ろへ折る
Mountain fold
along the creases.

36



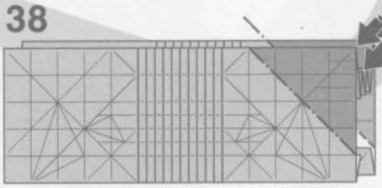
段折りしてフチを
後ろへ折る
Pleat and fold
the edge
to behind.

37

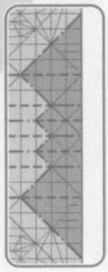


ついている折り筋で段折り
Pleat on both sides.

38

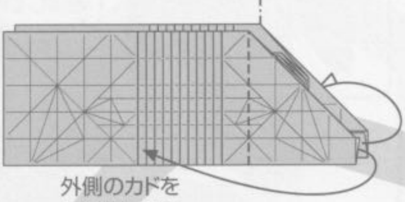


■の部分を沈めるように折る
Sink the darkened area.



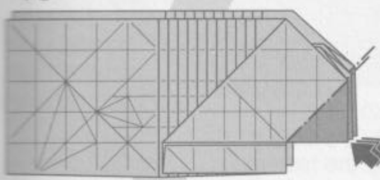
展開図
Crease Pattern

39

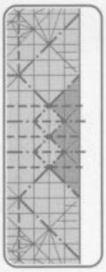


外側のカドを
反対側へ折る
Fold the flaps to
the other side.

40

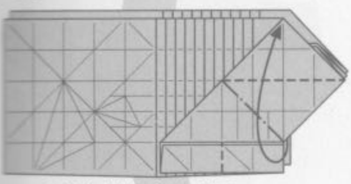


■の部分を沈めるように折る
Sink the darkened area.



展開図
Crease Pattern

41



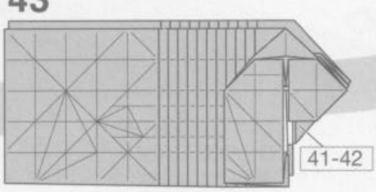
カドとカドを合わせて
つぶすように折る
Fold corner to corner
and squash.

42



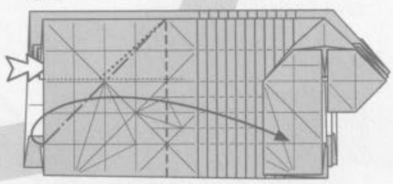
カドを1マス沈めるように折る
Sink the darkened area.

43



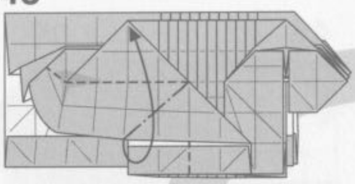
反対側も41-42と
同じように折る
Repeat 41-42 behind.

44



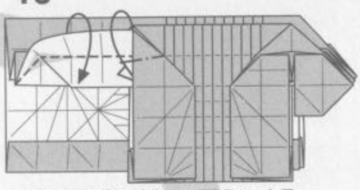
ついている折り筋で
ひろげてつぶすように折る
平らにはならない
Open and squash
using the creases.
The model will not lie flat.

45



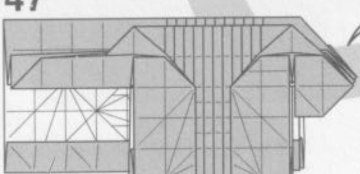
ついている折り筋でつぶすように折る
Fold up the edge and squash.

46



カドを内側に折って平らにする
Fold the corner to inside
and flatten the model.

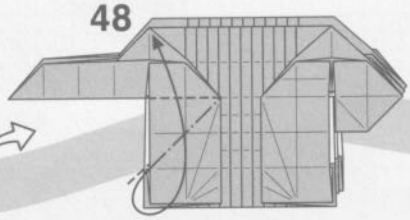
47



44-46

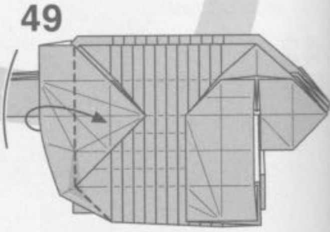
反対側も44-46と
同じように折る
Repeat 44-46 behind.

48



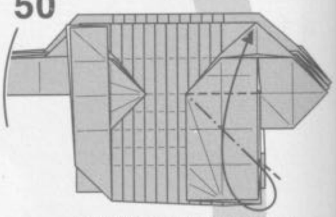
ついている折り筋で
ひろげてつぶすように折る
平らにはならない
Open and squash
using the creases.
The model will not lie flat.

49



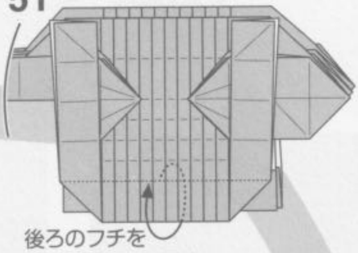
ついている折り筋で
平らに折りたたむ
Fold along the crease
and flatten the model.

50



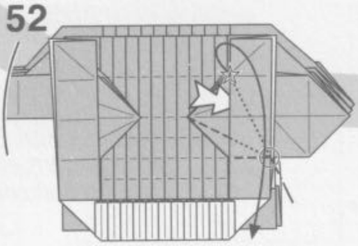
反対側も同じように折る
Repeat 48-49
on the other side.

51



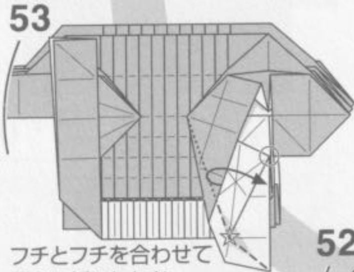
後ろのフチを
手前にひっくり返す
Wrap the hidden
edge around.

52



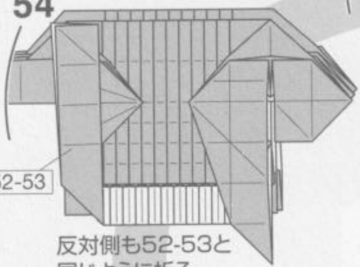
○のところからついている
斜めの折り筋でひろげて
つぶすように折る
平らにはならない
Open the layer folding
along the line starting
from the circled point.
The model will not lie flat.

53



フチとフチを合わせて
平らに折りたたむ
Fold edge to edge
and flatten the model.

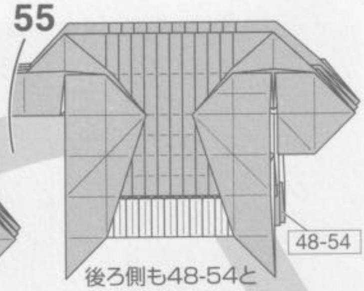
54



52-53

反対側も52-53と
同じように折る
Repeat 52-53
on the other side.

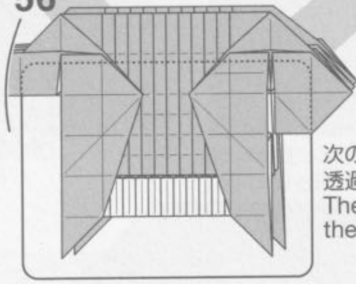
55



48-54

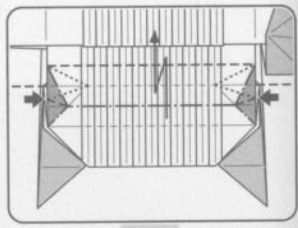
後ろ側も48-54と
同じように折る
Repeat 48-54
behind.

56



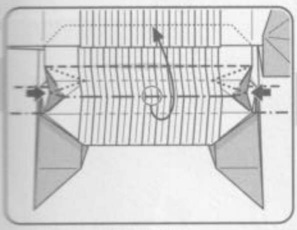
次の図は手前の部分を
透過して内側を見る
The next step shows
the inner view.

57



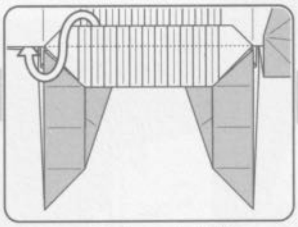
ついている折り筋で左右から
押し込みながら段折り
Sink the darkened area
using the creases and pleat.

58



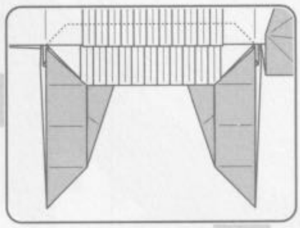
途中の図
In progress....

59

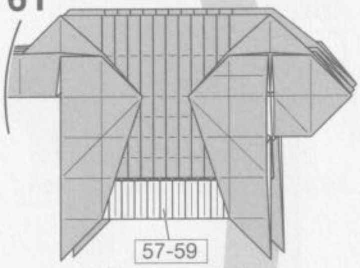


フチを下のすき間に
差し込む
Insert the edge
into the slot.

60

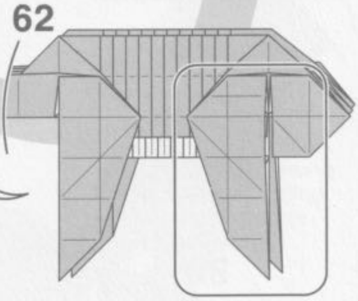


61

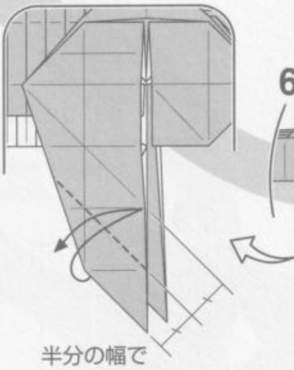


手前側も57-59と
同じように折る
Repeat 57-59 behind.

62

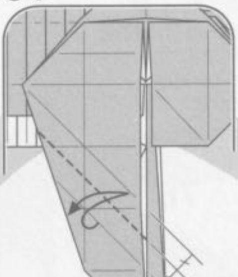


63



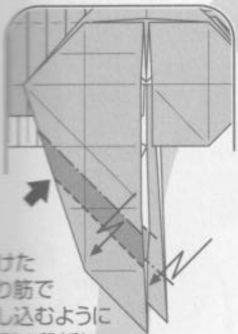
半分の幅で
折り筋をつける
Fold and unfold
at half of the width.

64



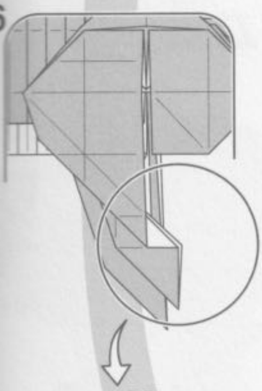
更に
半分の幅で
折り筋をつける
Fold and unfold
at half of the width.

65

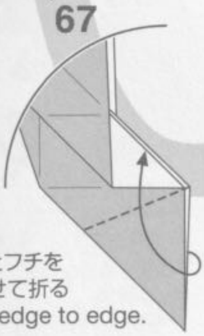


つけた
折り筋で
押し込むように
両側で段折り
Pleat on both sides.

66

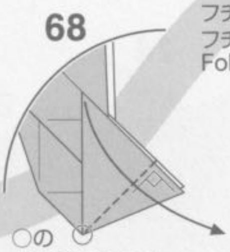


67



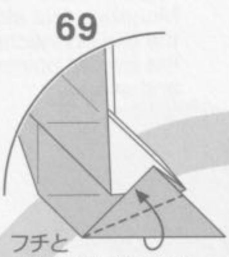
フチとフチを
合わせて折る
Fold edge to edge.

68



○の
ところからフチと
直角の線で折る
Fold down the corner
at the circled point.

69



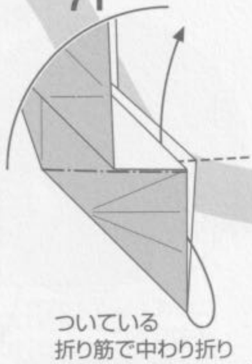
フチと
フチを合わせて折る
Fold edge to edge.

70



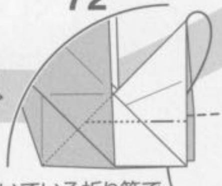
67の形まで戻す
Unfold to 67.

71



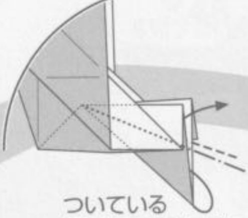
ついている
折り筋で中わり折り
Inside reverse fold.

72



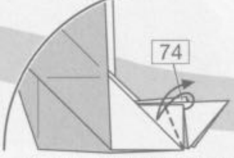
ついている折り筋で
中わり折り
Inside reverse fold.

73



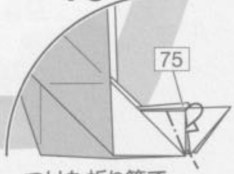
ついている
折り筋で中わり折り
Inside reverse fold.

74



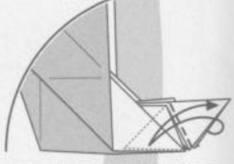
フチとフチを合わせて
折り筋をつける
反対側も同じように折る
Fold edge to edge
and unfold.
Repeat behind.

75



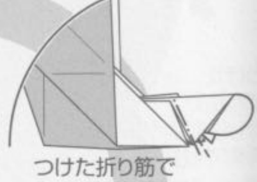
つけた折り筋で
カドを内側に折る
反対側も同じように折る
Fold the corner
to inside.
Repeat behind.

76



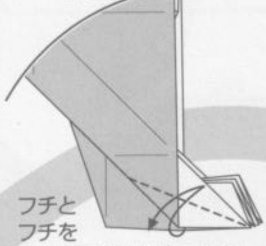
フチとフチを合わせて
折り筋をつける
Fold edge to edge
and unfold.

77



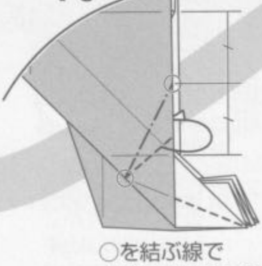
つけた折り筋で
カドを内側に折る
Fold the corner
inside.

78



フチと
フチを
合わせて折り筋をつける
Fold edge to edge
and unfold.

79



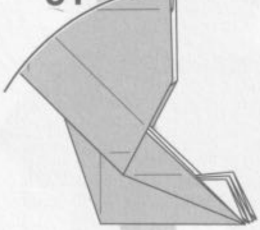
○を結ぶ線で
内側に引き寄せるように折る
Mountain fold along
the line connecting
the circled points
and swivel.

80

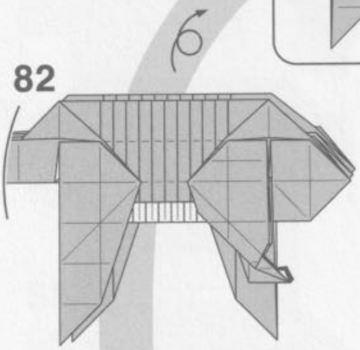


反対側も78-79と
同じように折る
Repeat 78-79 behind.

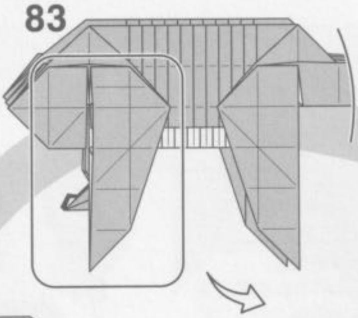
81



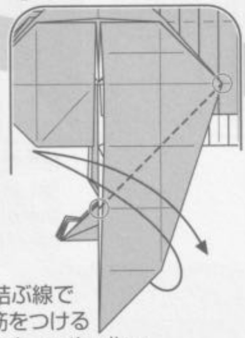
82



83

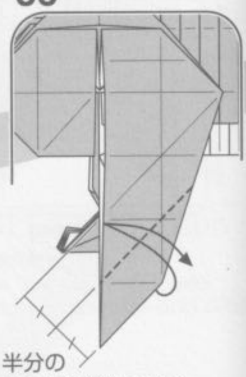


84



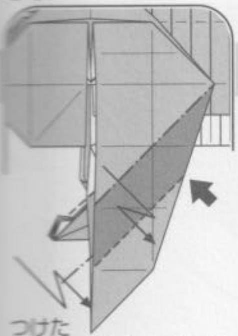
○を結ぶ線で
折り筋をつける
Fold along the line
connecting the
circled points
and unfold.

85



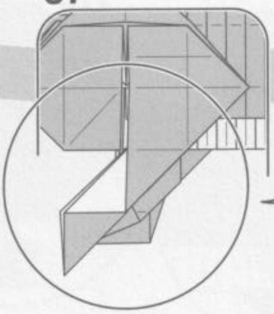
半分の
幅で折り筋をつける
Fold and unfold
at half of the width.

86

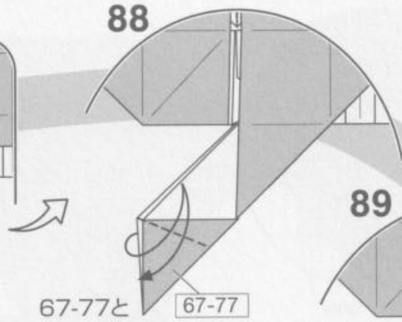


つけた
折り筋で押し込むように
両側で段折り
Pleat on both sides.

87

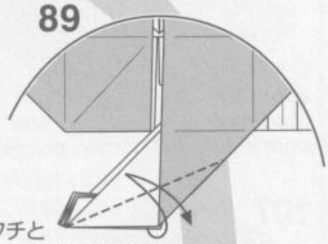


88



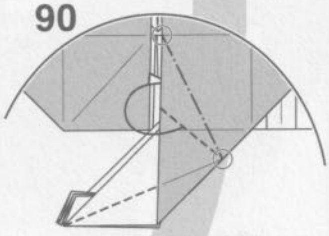
67-77と
同じように折る
Repeat 67-77.

89



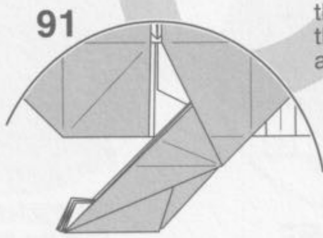
フチと
フチを合わせて折り筋をつける
Fold edge to edge and unfold.

90

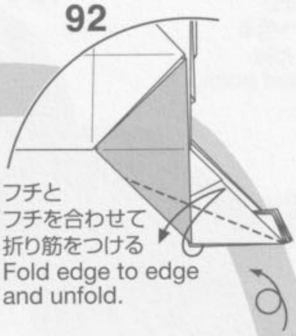


○を結ぶ線で内側に
引き寄せるように折る
Mountain fold along the line connecting the circled points and swivel.

91

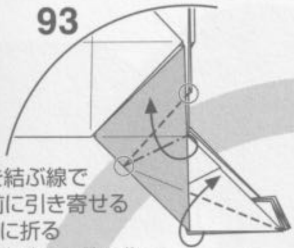


92



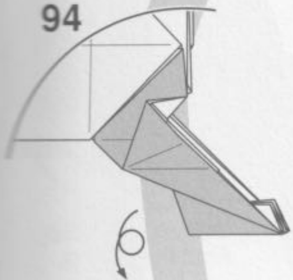
フチと
フチを合わせて
折り筋をつける
Fold edge to edge and unfold.

93

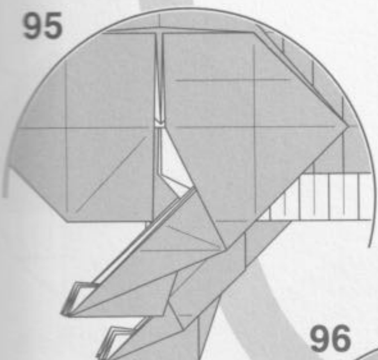


○を結ぶ線で
手前に引き寄せる
ように折る
Fold along the line connecting the circled points and swivel.

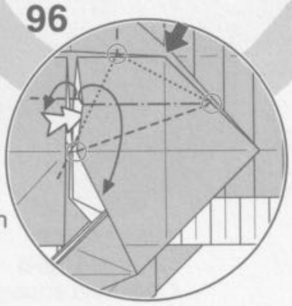
94



95

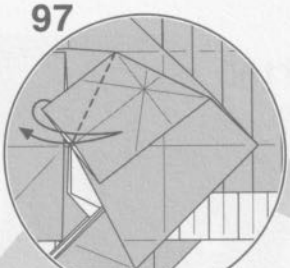


96



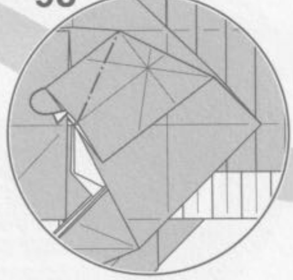
ついている折り筋と
○を結ぶ線で
ひろげてつぶす
ように折る
Open and squash using the line connecting the circled points.

97



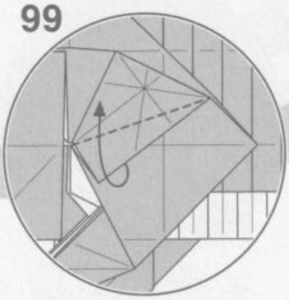
カドを反対側へ折って
折り筋をつける
Fold the flap to the other side and unfold.

98



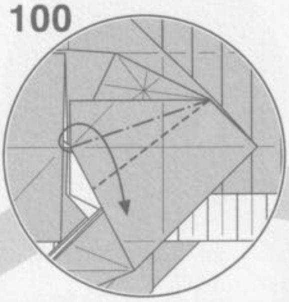
つけた折り筋で
カドを内側に折り込む
Fold the corner inside.

99



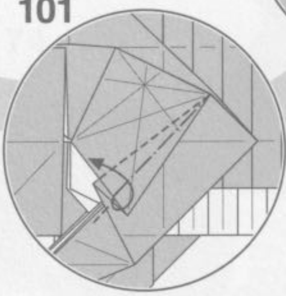
フチを反対側へ折る
Fold up the flap.

100



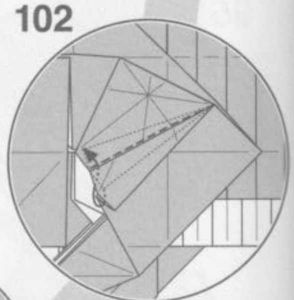
反対側へひろげて
つぶすように折る
Open and squash.

101



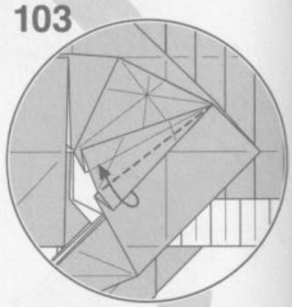
内側をひろげて
つぶすように折る
Open and squash.

102



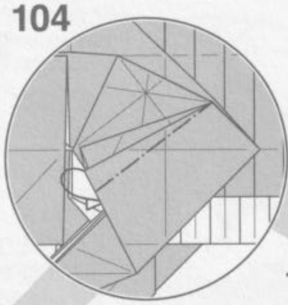
内側のカドを
出すように
中わり折り
Pull out the
hidden layer.

103



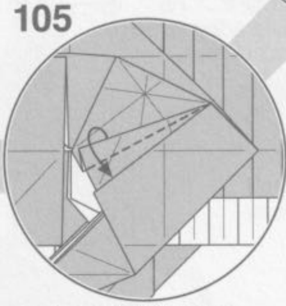
フチを反対側へ折る
Fold the flap up.

104



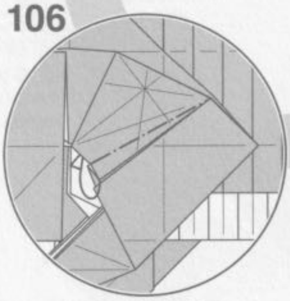
ついている
折り筋でカドを
内側に折り込む
Fold the corner
to inside.

105



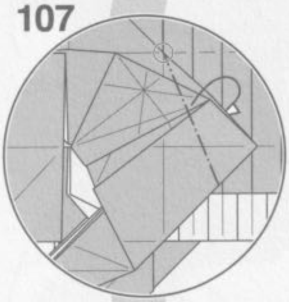
フチを反対側へ折る
Fold the flap down.

106



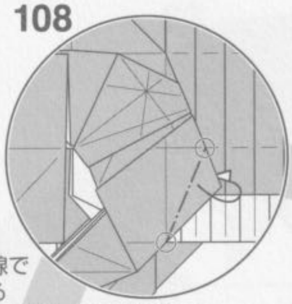
ついている折り筋で
カドを内側に折り込む
Fold the corner to inside.

107



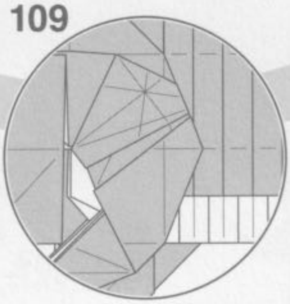
○のところから
斜めに後ろへ折る
Mountain fold
at the circled point.

108

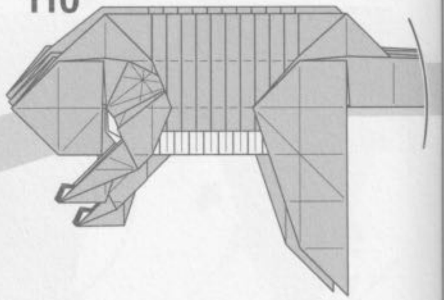


○を結ぶ線で
後ろへ折る
Mountain fold along the line
connecting the circled points.

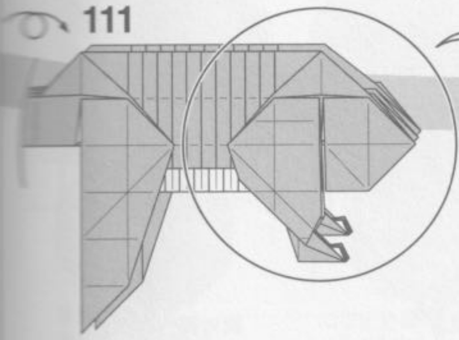
109



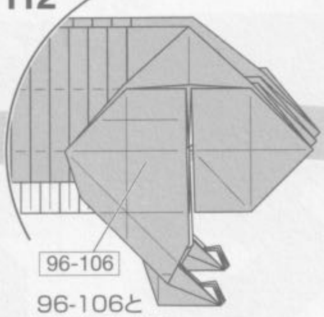
110



111

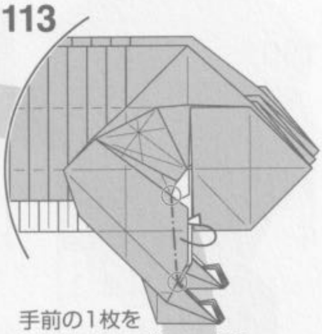


112



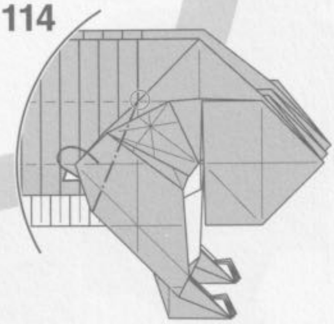
96-106と
同じように折る
Repeat 96-106.

113



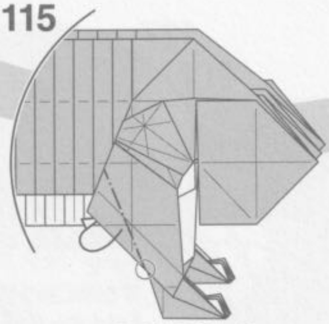
手前の1枚を
○を結ぶ線で後ろへ折る
Mountain fold along the line connecting the circled points.

114



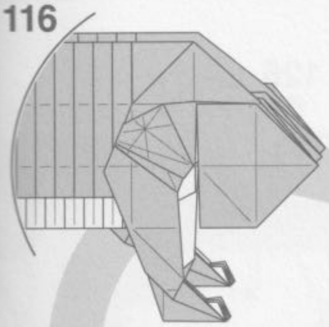
○のところから
斜めに後ろへ折る
Mountain fold at the circled point.

115

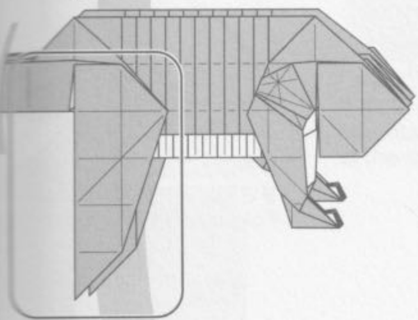


○のところから
斜めに後ろへ折る
Mountain fold at the circled point.

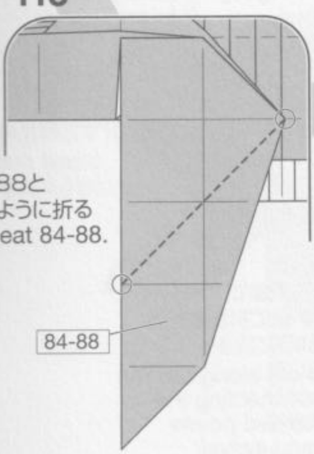
116



117

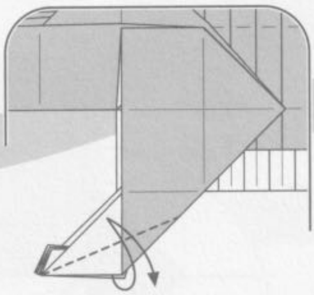


118



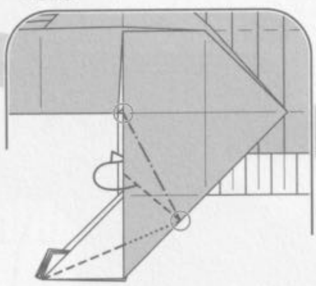
84-88と
同じように折る
Repeat 84-88.

119



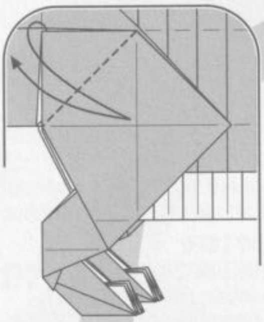
フチとフチを合わせて
折り筋をつける
Fold edge to edge and unfold.

120



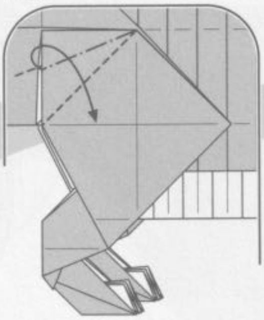
○を結ぶ線で後ろへ
引き寄せるように折る
Mountain fold along the line connecting the circled points and swivel.

130



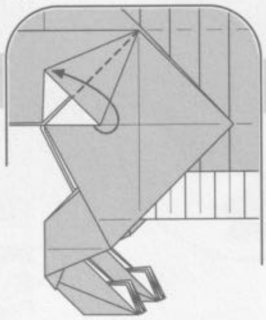
カドを反対側へ折って
折り筋をつける
Fold the flap
to the other side
and unfold.

131



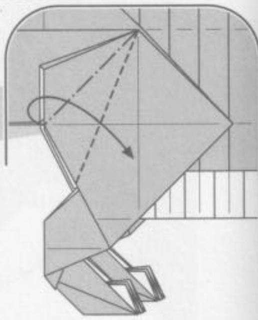
内側をひろげて
つぶすように折る
Open and squash.

132



カドを反対側へ折る
Fold the flap up.

133



反対側へひろげて
つぶすように折る
Open and squash.

129



反対側も
118-127と同じように折る
Repeat 118-127 behind.

128

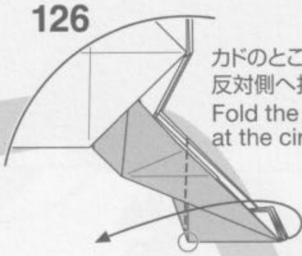


127



カドを
すき間に折り込む
Fold the corner
into the pocket.

126



カドのところで
反対側へ折る
Fold the corner
at the circled point.

125



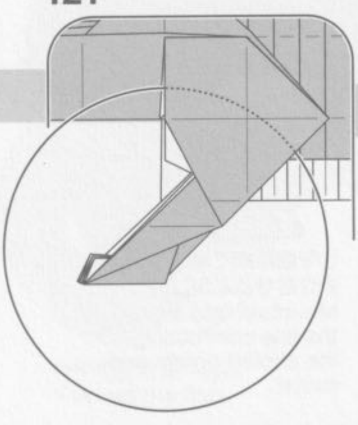
フチのところで
すき間に折り込む
Fold along the edge inside.

124



カドを
後ろの
すき間に差し込む
Insert the edge
into the slit.

121



122



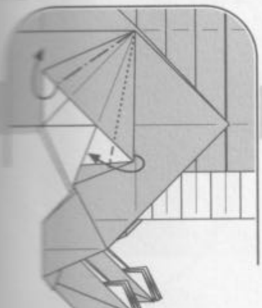
フチと
フチを
合わせて
折り筋をつける
Fold edge to edge
and unfold.

123



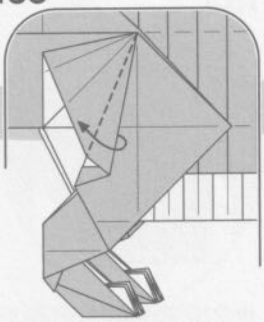
○を
結ぶ線で
手前に引き寄せる
ように折る
Fold along the line
connecting the
circled points
and swivel.

134



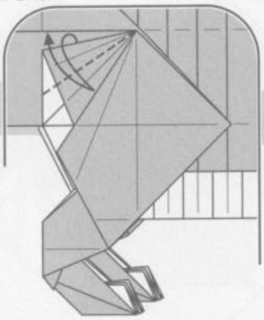
半分の角度で
ずらすように折る
Swivel fold
along angle
bisectors

135



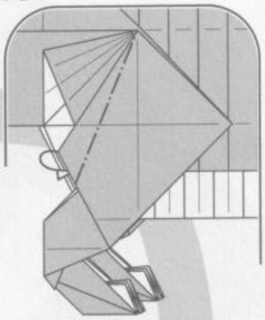
フチを反対側へ折る
Fold the flap
to the other side.

136



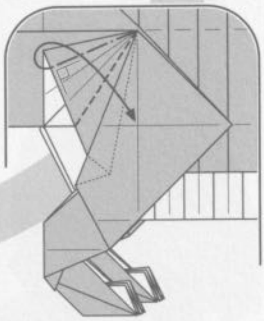
フチとフチを合わせて
折り筋をつける
Fold edge to edge
and unfold.

137



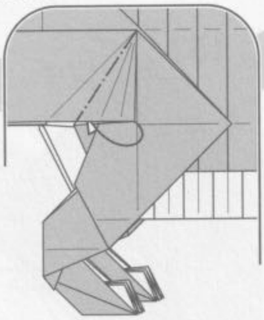
ついている折り筋で
カドを内側に折る
Fold the corner
to inside.

138



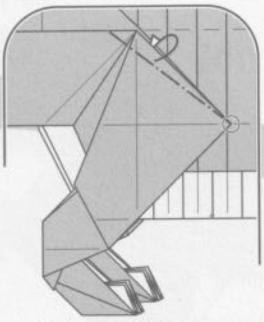
フチと直角の折り筋を
つまんで折りたたむ
Mountain fold at a
right angle starting
from the corner,
pinch the crease
line, and fold it
down.

139



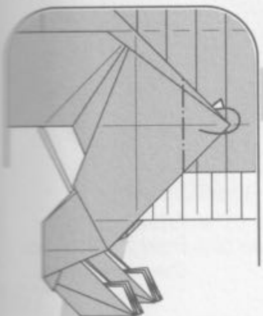
カドを内側に折り込む
Fold the corner
to inside.

140



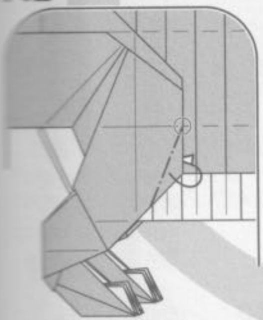
○のところから
手前の1枚を後ろへ折る
Mountain fold
at the circled point.

141



カドを後ろへ折る
Mountain fold.

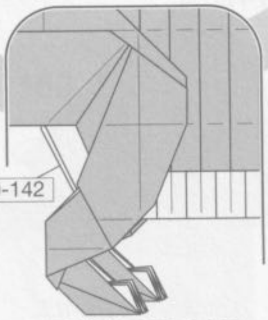
142



カドを○のところで
後ろへ折る
Mountain fold
at the circled point.

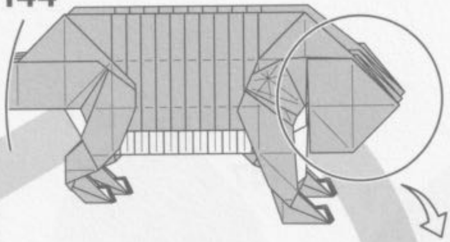
143

130-142

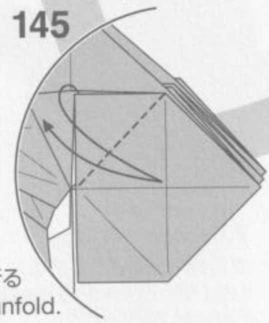


反対側も130-142と
同じように折る
Repeat 130-142
behind.

144

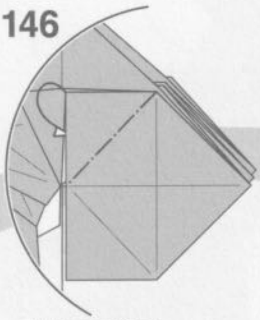


145



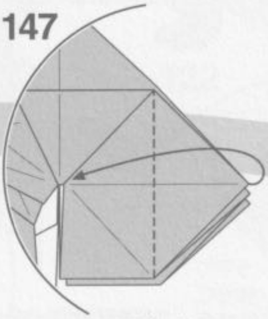
カドを反対側へ折って
折り筋をつける
反対側も同じように折る
Fold the flap and unfold.
Repeat behind.

146



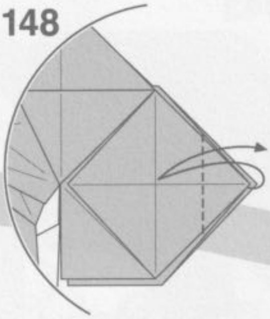
つけた折り筋で
カドを内側に折り込む
反対側も同じように折る
Fold the corner to inside.
Repeat behind.

147



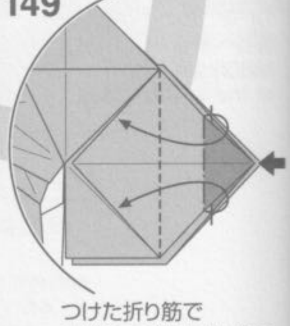
カドを反対側へ折る
Fold the flap
to the other side.

148



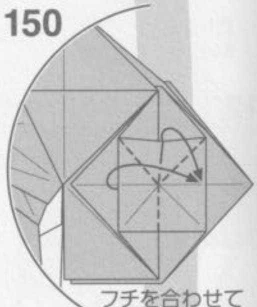
カドを折り筋に合わせて
折り筋をつける
Fold the corner to the
crease and unfold.

149



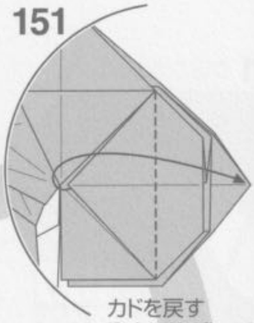
つけた折り筋で
カドをつぶすように折る
Spread sink.

150



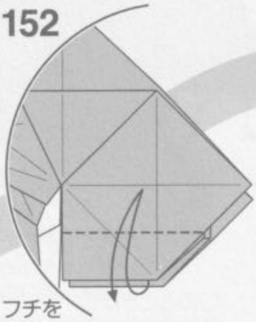
フチを合わせて
折りたたむ
Assemble using
the creases.

151



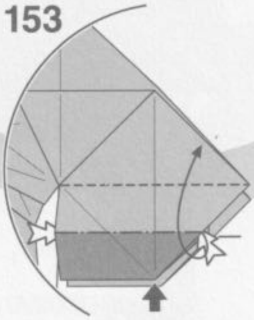
カドを戻す
Fold the flap to
the other side.

152



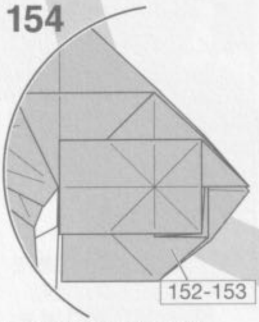
フチを
折り筋に合わせて
折り筋をつける
Fold the edge
to the crease
and unfold.

153



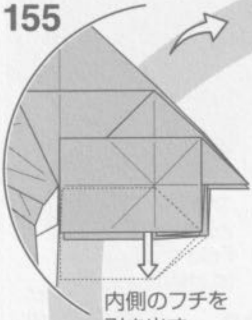
フチをひろげて
つぶすように折る
Spread sink the
darkened area.

154



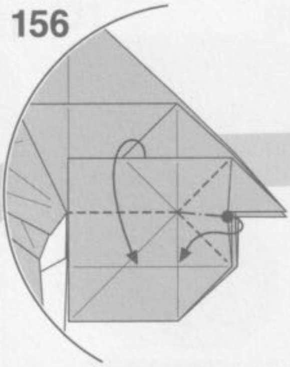
反対側も152-153と
同じように折る
Repeat 152-153 behind.

155



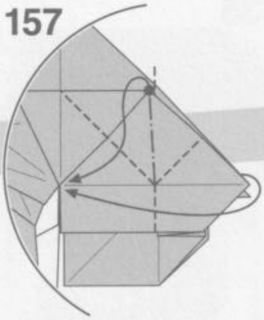
内側のフチを
引き出す
Pull out the
hidden layer.

156



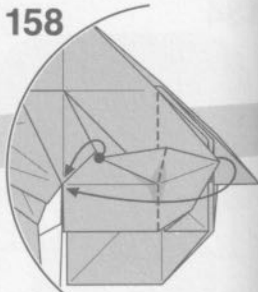
●の部分を中わり折り
しながらフチを下へ折る
Fold down the edge while
inside reverse folding
the dotted edge.

157



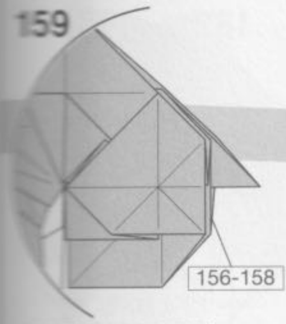
●のカドを中わり折りしながら
右のカドを反対側へ折る
Fold the right corner
to the other side while
inside reverse folding
the dotted corner.

158



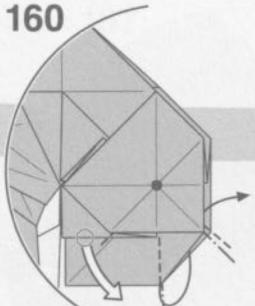
途中の図
In progress....

159



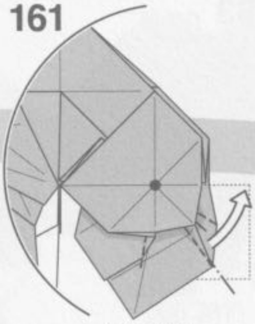
反対側も156-158と
同じように折る
Repeat 156-158
behind.

160



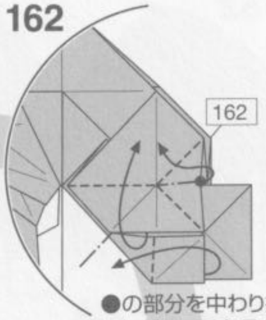
○の部分をつまんで
●を支点にずらすように
折る
Pinch the circled point
and swivel as shown.

161



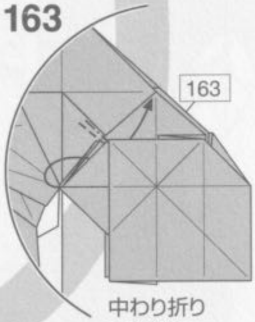
途中の図
In progress....

162



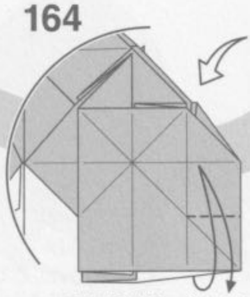
●の部分を中わり折り
しながらフチをそれぞれ
反対側へ折る
反対側も同じように折る
Fold the edges while
inside reverse folding
the dotted edge.
Repeat behind.

163



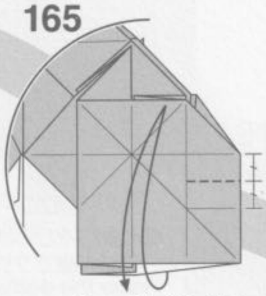
中わり折り
反対側も
同じように折る
Inside reverse
fold.
Repeat behind.

164



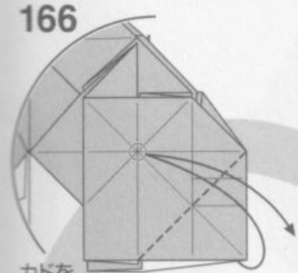
フチを折り筋に合わせて
折り筋をつける
Fold the edge to
the crease and unfold.

165



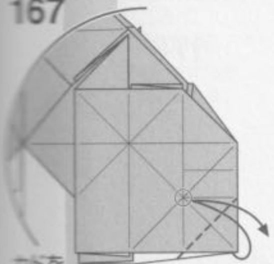
フチとフチを合わせて
折り筋をつける
Fold edge to edge
and unfold.

166



カドを
○に合わせて折り筋をつける
Fold the corner to the
circled point and unfold.

167



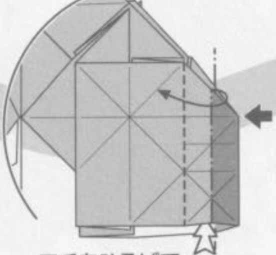
カドを
○に合わせて折り筋をつける
Fold the corner to the
circled point and unfold.

168



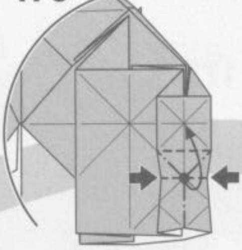
フチを
折り筋に合わせて
折り筋をつける
Fold the edge to the
crease and unfold.

169



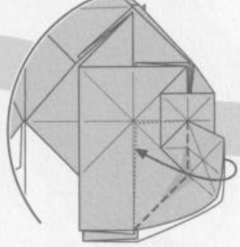
フチをひろげて
つぶすように折る
Spread sink the
darkened area.

170



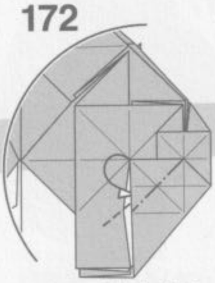
中心線をつまんで
起こすように折る
平らにはならない
Pinch and raise
the edge.
The model will
not lie flat.

171



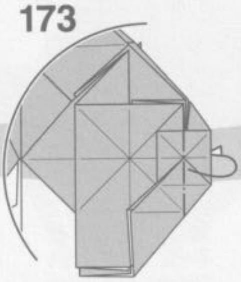
ついている折り筋で
フチを平らに折る
Fold the flap
and flatten.

172



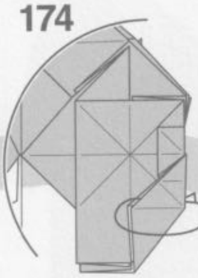
ついている折り筋で
カドを内側に折る
Fold the corner
to inside.

173



ついている折り筋で
フチを後ろへ折る
Mountain fold
along the crease.

174



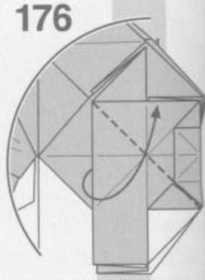
手前の1枚を
後ろへかぶせる
ように折る
Unwrap the layer
inside out.

175



カドを下へ
かぶせるように折る
Outside reverse fold.

176



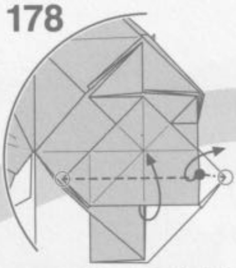
ついている折り筋で
起こすように折る
平らにはならない
Fold along the crease.
The model will not lie
flat.

177



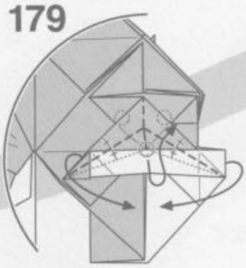
ひろげてつぶすように折る
Squash and flatten.

178



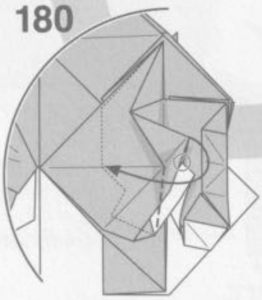
●の部分をひろげながら
○を結ぶ線でフチを折る
Raise the dotted edge
and fold along the
line connecting
the circled points.

179



○のところが
フチに合うところで
中わり折りのように折る
平らにはならない
Fold the corners while
inside reverse folding
the white edge. Fold so
that the circled points
will meet.

180



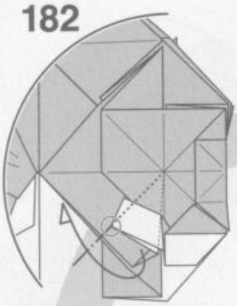
そのまま平らに折りたたむ
Fold the flap and flatten.

181



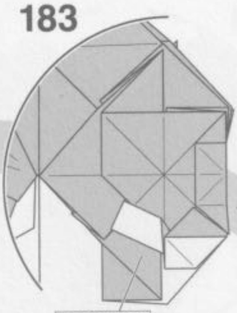
内側のフチを
手前に出す
Pull out the
edge to front.

182



○のところで後ろへ折る
Mountain fold
at the circled point.

183



176-182

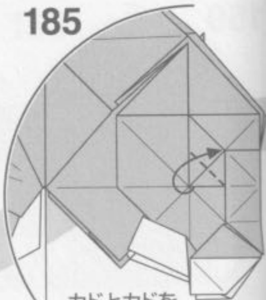
反対側も176-182と
同じように折る
Repeat 176-182
behind.

184



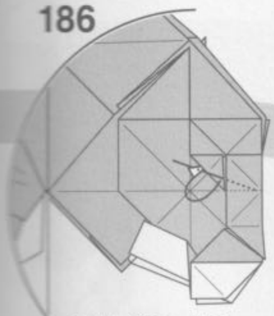
中わり折り
Inside reverse fold.

185



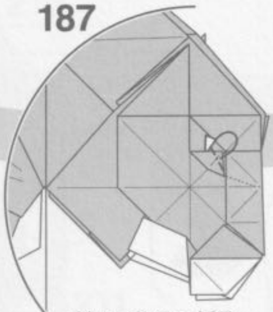
カドとカドを
合わせて折る
Fold corner
to corner.

186



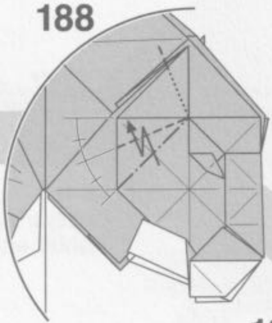
斜めに後ろへ折る
Mountain fold.

187



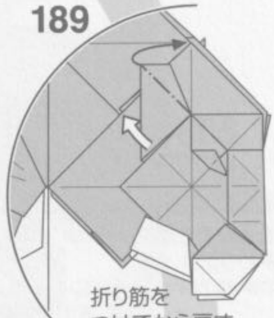
斜めに後ろへ折る
Mountain fold.

188



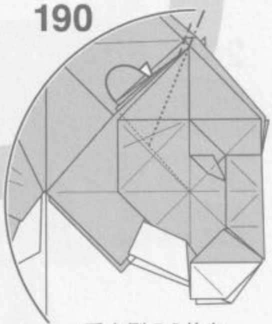
半分の角度で
後ろへ引き寄せる
ように段折り
Swivel inside
along an angle
bisector.

189



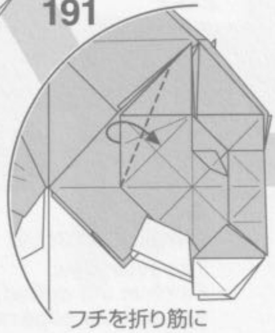
折り筋を
つけてから戻す
Unfold.

190



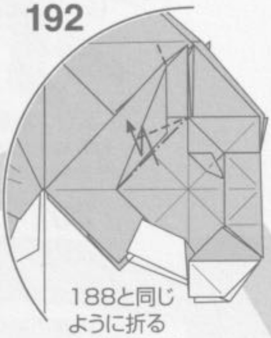
一番内側の1枚を
半分の角度で内側に折る
Inside reverse fold
the innermost layer.

191



フチを折り筋に
合わせて折る
Fold the edge
to the crease.

192



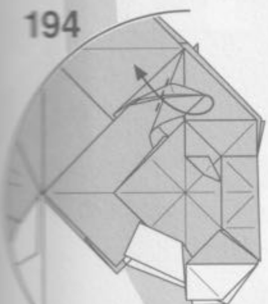
188と同じ
ように折る
Swivel fold
as in 188.

193



フチのところで
つまむように折る
Pinch the corner
along the edge.

194



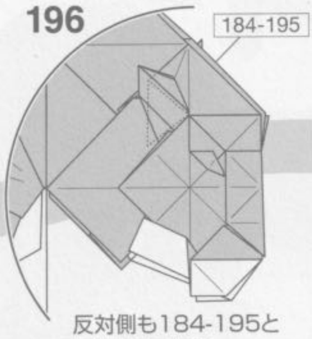
戻すように折る
Fold up
the corner.

195



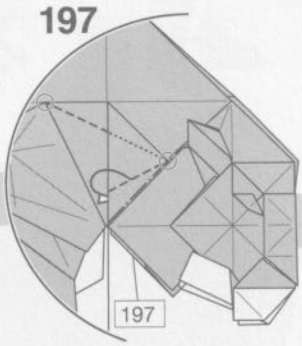
190で
折った部分を
引っかかる
ところまで戻す
Unfold
the edge
folded in 190.

196



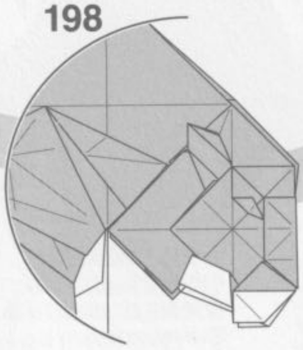
反対側も184-195と
同じように折る
Repeat 184-195
behind.

197

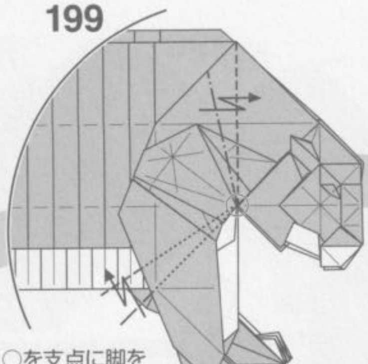


○を結ぶ線で内側に
引き寄せるように折る
反対側も同じように折る
Swivel inside.
Repeat behind.

198

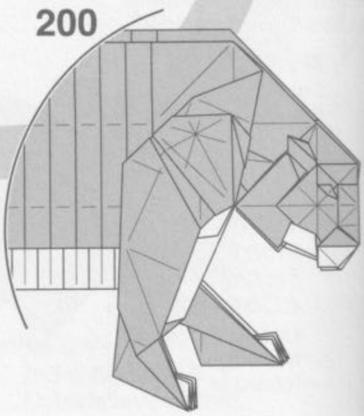


199

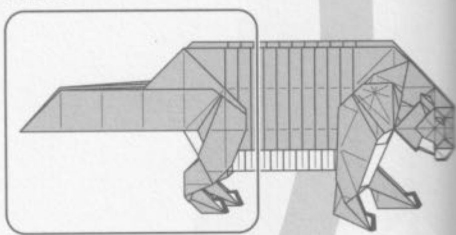


○を支点に脚を
ずらすように段折り
Pleat and swivel
the front leg.

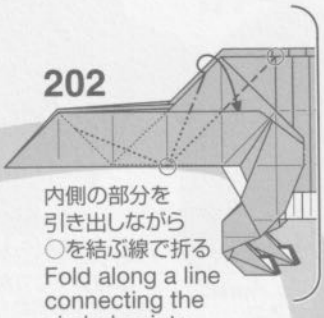
200



201

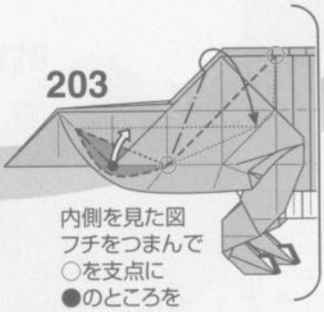


202



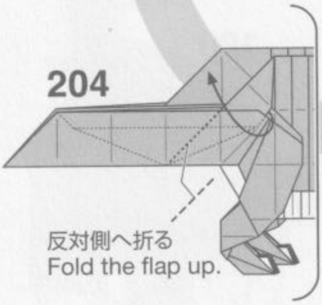
内側の部分を
引き出しながら
○を結ぶ線で折る
Fold along a line
connecting the
circled points.

203



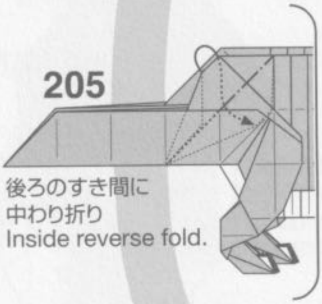
内側を見た図
フチをつまんで
○を支点に
●のところを
引き出して折りたたむ
The inner view.
Pinch at the dotted line
and pull the edge out.

204



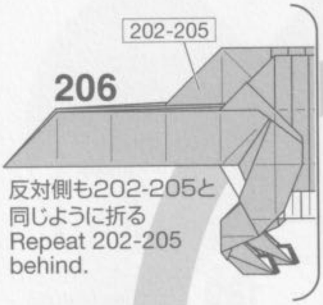
反対側へ折る
Fold the flap up.

205



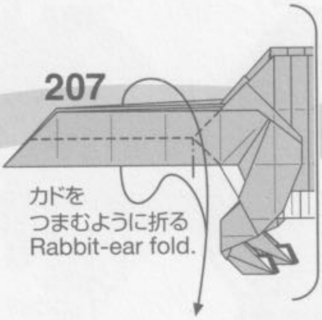
後ろのすき間に
中わり折り
Inside reverse fold.

206



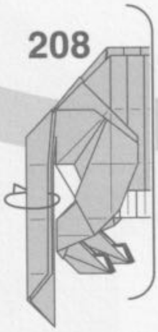
反対側も202-205と
同じように折る
Repeat 202-205
behind.

207



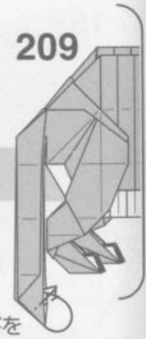
カドを
つまむように折る
Rabbit-ear fold.

208



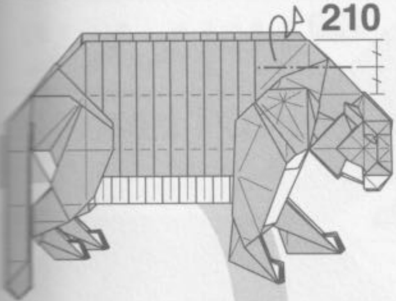
外側の1枚を
後ろへかぶせる
ようにひっくり返す
Unwrap the layer.

209



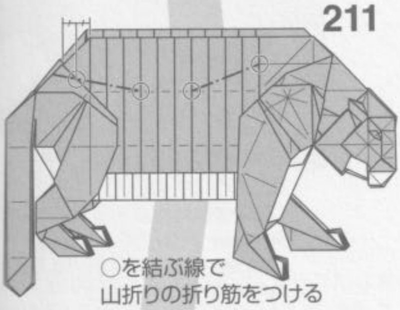
カドを
内側に折り込む
Fold the corner
to inside.

210



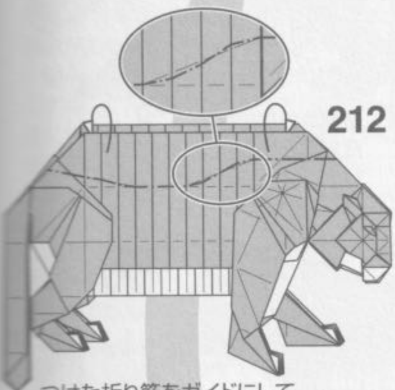
半分の幅で
山折りの折り筋をつける
Mountain fold
at half of the width
and unfold.

211



○を結ぶ線で
山折りの折り筋をつける
Fold and unfold along
the lines connecting the
circled points.

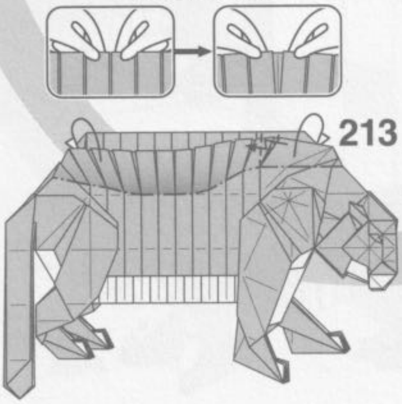
212



つけた折り筋をガイドにして
背中のラインが曲線になるよう
フチを後ろへ折る
Mountain fold using the crease
linesmade in 210-211 as guides.
Shape the line of the backbone
so that it will be curved right.

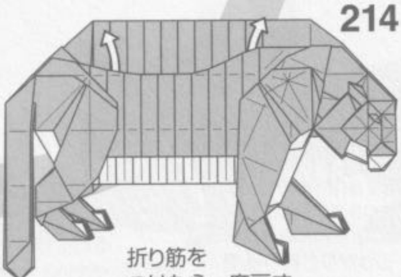
213

ヒダの引き出し方



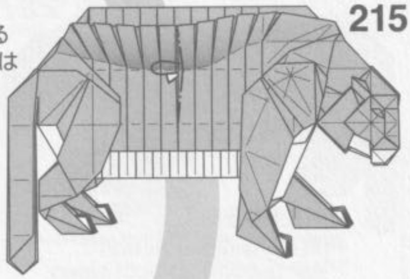
途中の図
そのままでは内側に
折り込めないので
ヒダを引き出して
フチを扇状にひろげて
調整する
In progress....
To mountain fold,
it is necessary to
open the cluster
of layers into
fan shapes.

214



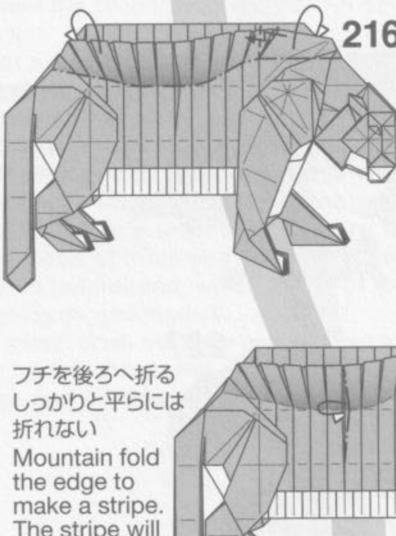
折り筋を
つけたら一度戻す
Unfold.

215



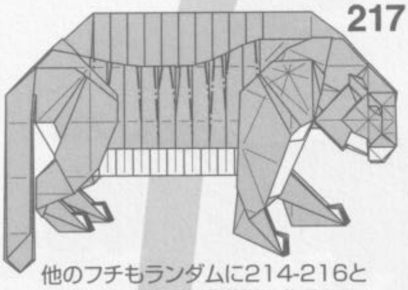
フチを後ろへ折る
しっかりと平らには
折れない
Mountain fold
the edge to
make a stripe.
The stripe will
not flatten.

216



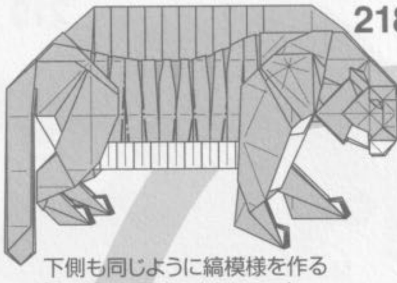
そのまま213と
同じように折る
Assemble
as in 213.

217



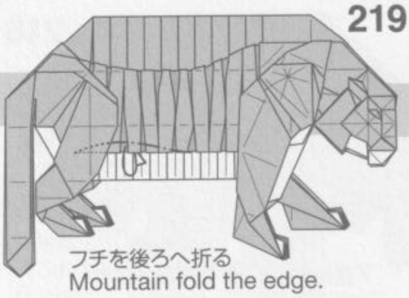
他のフチもランダムに214-216と
同じように折って縞模様を作る
Make stripes to your taste
as in 214-216.

218



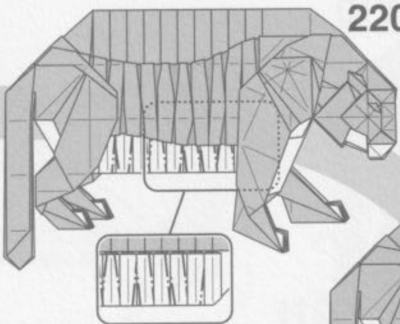
下側も同じように縞模様を作る
Repeat on the lower edge.

219



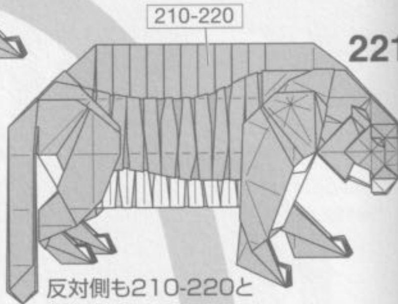
フチを後ろへ折る
Mountain fold the edge.

220



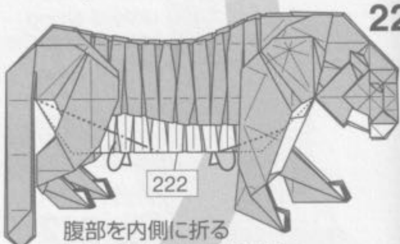
腹部も同じように
縞模様を作る
Repeat on the
bottom edge.

221



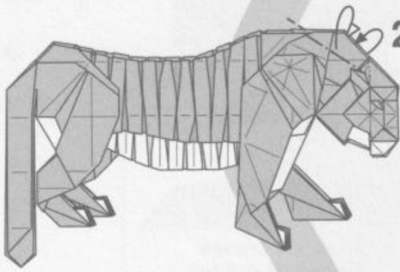
反対側も210-220と
同じように折る
（縞模様は対称にならなくてよい）
Repeat 210-220 behind.
Stripes do not have to be
symmetrical.

222



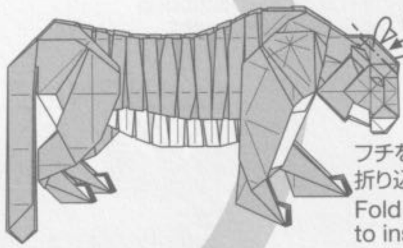
腹部を内側に折る
反対側も同じように折る
Fold the edges to inside.
Repeat behind.

223



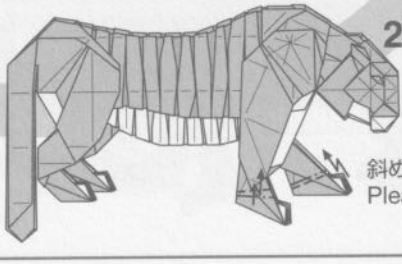
フチを内側に
折り込む
Fold the edges
to inside.

224



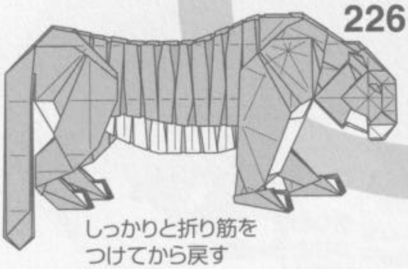
フチを内側に
折り込む
Fold the edges
to inside.

225



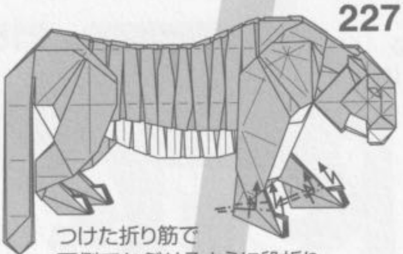
斜めに段折り
Pleat.

226



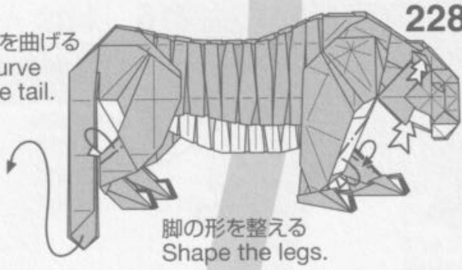
しっかりと折り筋を
つけてから戻す
Unfold.

227



つけた折り筋で
両側でかぶせるように段折り
Pleat outside on both sides.

228

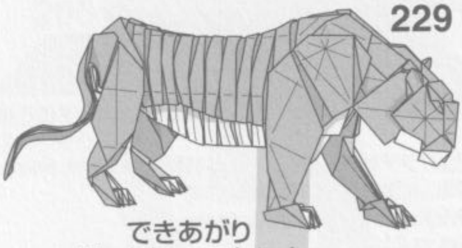


尾を曲げる
Curve
the tail.

耳や頭を
ひろげる
Open the ear
and head.

脚の形を整える
Shape the legs.

229

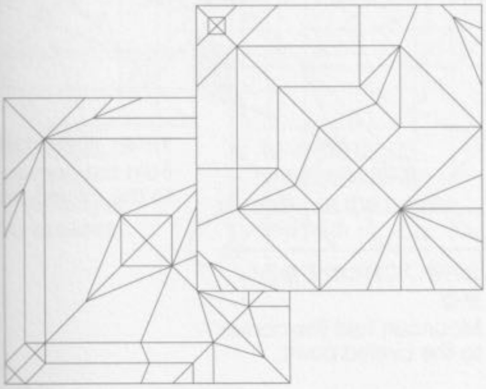


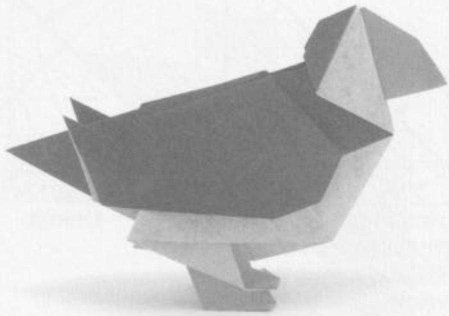
できあがり
Model completed.

ツノメドリ

Horned Puffin

Created in 2020





推奨用紙 15cm

この作品は2枚の複合によってカラフルな鳥の作品を作ろうという試みからスタートして、試してみたいくつかの試作の内の一つでした。数年後に偶然箱の中から発掘された際、単純化した趾の表現やスマートな組み立て方など、全体的にまとまりがよかったため、比率の調整や細部を整理して完成したという経緯があります。

組み立てについては、両方のパーツの比率を同じにすることで、それぞれがうまく噛み合めばいいな程度に期待していたのですが、結果として、差し込んだ部分を段折りするだけという、期待以上に面白みのある手順となったので、ぜひ実際に体験してみてほしいポイントです。

こういった意味のある複合作品は今後も作り続けていきたいと思っていますが、狙ってもなかなかできるものではないのが折り紙創作の難しいところです。

黒と白、そしてオレンジと白の系統の色が表裏となる用紙が求められますが、複雑な折り込みはないので、一般的な裏が白の折り紙用紙で十分に折ることができます。

This work was one of several prototypes I experimented with, initially as an attempt to fold a colorful bird by the composite of two sheets. When it was accidentally discovered in a box a few years later, I found that the simplified representation of the toes and the smart way it was assembled made the whole piece work well, so I adjusted the proportions and rearranged the details to finish it.

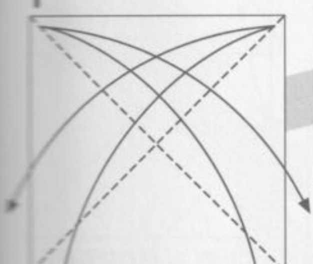
As for assembly, I had first hoped that by making the proportions of both parts equal in size, they would work together well. It turned out that the steps of simple pleat folding of clustered layers were more interesting than I had expected, and I would like you to experience it too.

I personally would like to keep designing "compelling" models like this one, but they are in most cases by-products of trials and errors that cannot easily be targeted beforehand, which is one of the difficulties of designing origami models.

The model does not have complicated folding steps, so you can fold it out with ordinary black-and-white and orange-and-white kamis.

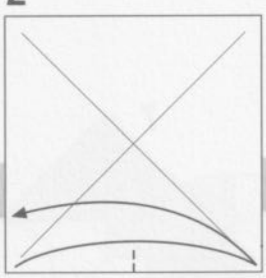
[腹側]
[Ventral Part]

1



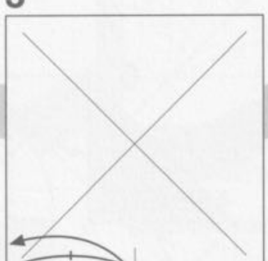
三角に折り筋をつける
Fold in halves and unfold.

2



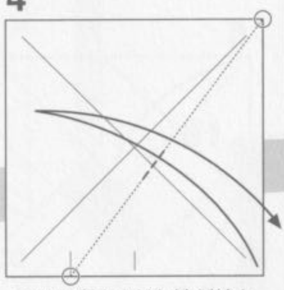
カドとカドを合わせてフチに印をつける
Fold corner to corner, but only mark on the edge. Unfold.

3



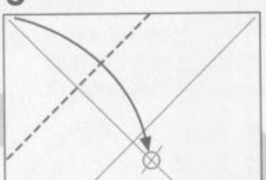
カドをつけた印に合わせてフチに印をつける
Fold the corner to the mark and unfold.

4



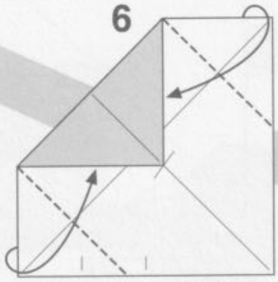
つけた印とカドを結ぶ線と折り筋の交点に印をつける
Mark at the intersection of the line connecting the circled points.

5



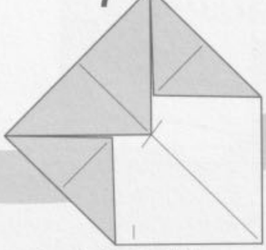
カドをつけた印に合わせて
折る
Fold the corner to
the circled point.

6



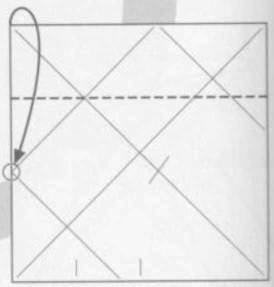
フチとフチを合わせて折る
Fold edge to edge.

7



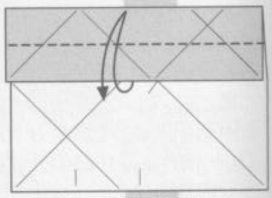
全部ひろげる
Unfold everything.

8



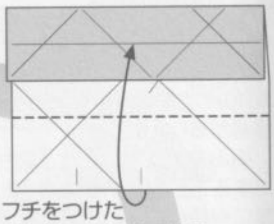
カドを○に合わせて折る
Fold the corner to
the circled point.

9



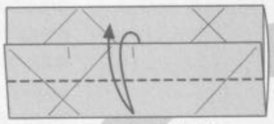
フチとフチを合わせて
折り筋をつける
Fold edge to edge
and unfold.

10



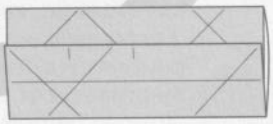
フチをつけた
折り筋に合わせて折る
Fold the edge to
the crease.

11



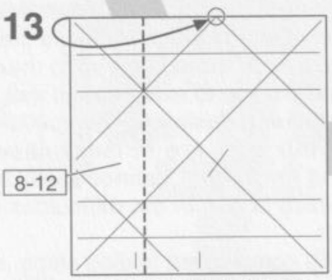
フチとフチを合わせて
折り筋をつける
Fold edge to edge
and unfold.

12



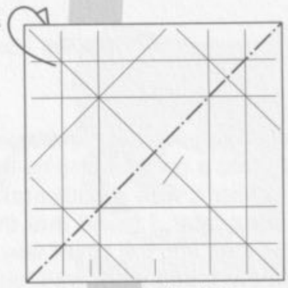
全部ひろげる
Unfold everything.

13



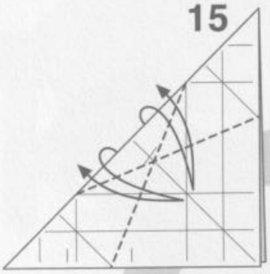
8-12と同じように折る
Repeat 8-12.

14



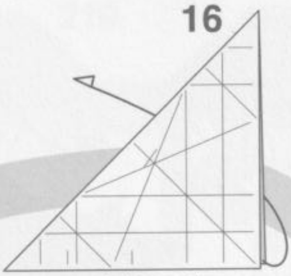
後ろへ半分に折る
Mountain fold
in half.

15



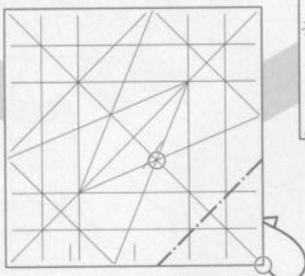
フチを折り筋に合わせて
折り筋をつける
Fold the edges to
creases and unfold.

16



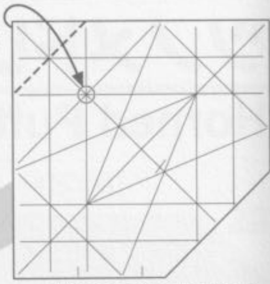
全部ひろげる
Unfold.

17



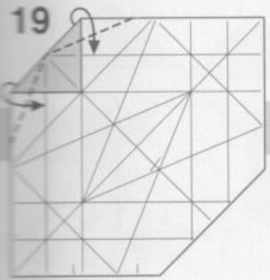
カドを○に合わせて後ろへ
折る
Mountain fold the corner
to the circled point.

18



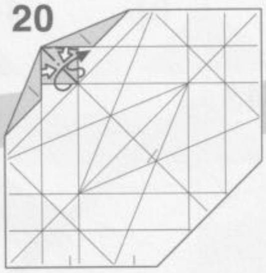
カドを○に合わせて折る
Fold the corner
to the circled point.

19



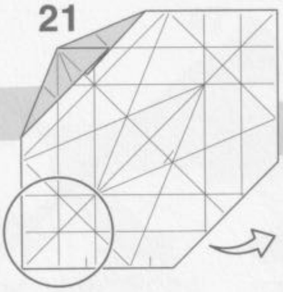
フチを折り筋に
合わせて折る
Fold the edges
to the creases.

20

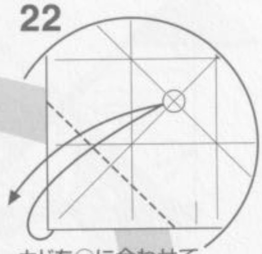


カドを引き出して
つまむように折る
Pull out the corner
and fold.

21

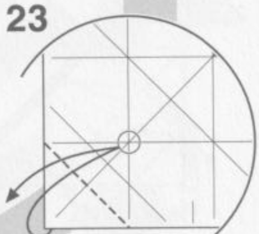


22



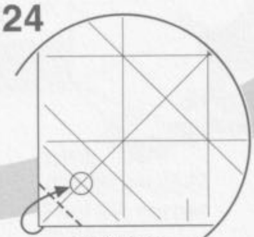
カドを○に合わせて
折り筋をつける
Fold the corner
to the circled point
and unfold.

23



カドを○に合わせて
折り筋をつける
Fold the corner
to the circled point
and unfold.

24



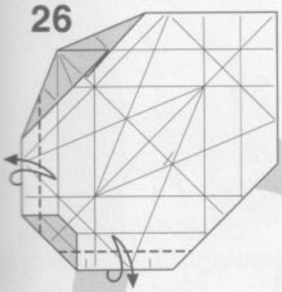
カドを○に
合わせて折る
Fold the corner
to the circled point.

25



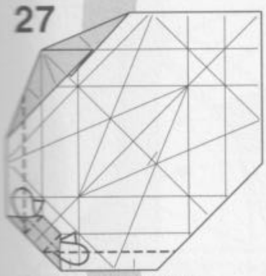
ついている
折り筋で折る
Fold along
the crease.

26



フチを折り筋に合わせて
折り筋をつける
Fold the edges to the
creases and unfold.

27



ついている折り筋と
○を結ぶ線でフチを
内側に折る
Fold the edges
using the creases
and swivel inside.

28



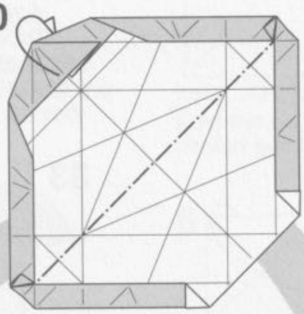
フチを
つまむように折る
Rabbit-ear fold.

29



反対側も22-28と
同じように折る
Repeat 22-28
on the other side.

30



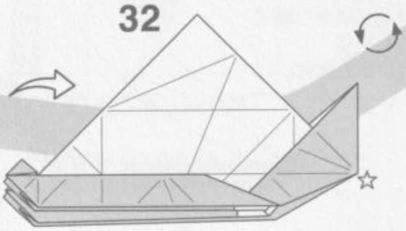
ついている折り筋で
後ろへ折る
Mountain fold.

31

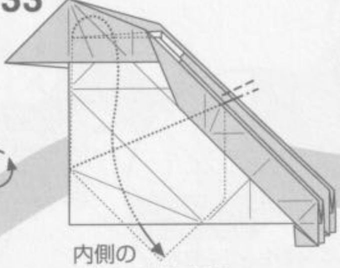


半分に折る
Fold in half.

32

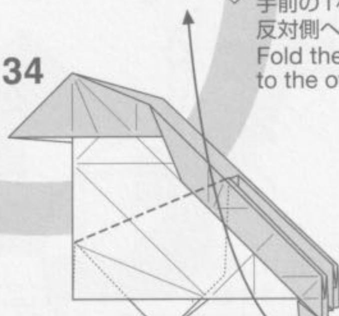


33



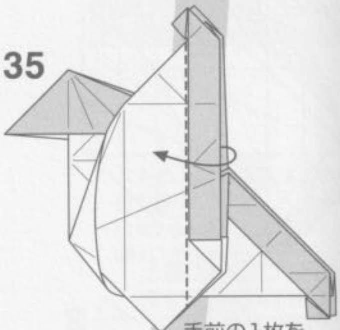
内側の
カドをついている
折り筋で中わり折り
Inside reverse fold
the hidden flap
using the creases.

34



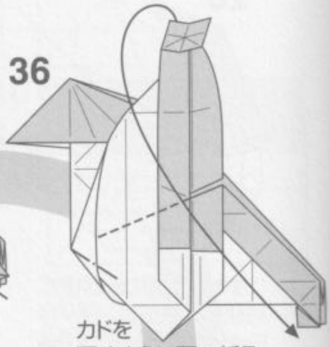
上へ折る
平らにはならない
Fold the corner up.
The model will not lie flat.

35



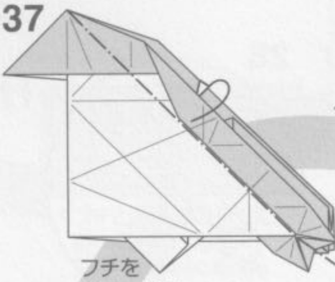
手前の1枚を
反対側へ折る
Fold the edge
to the other side.

36



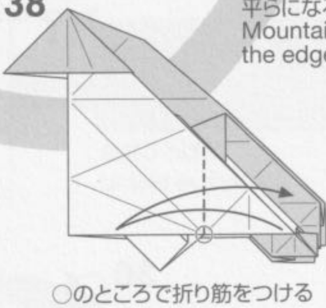
カドを
戻すように下へ折る
Close the layer.

37



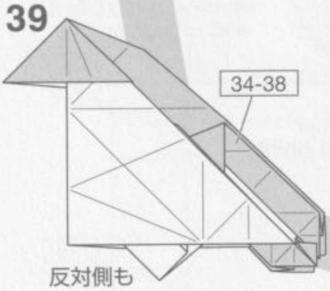
フチを
後ろへ折る
平らになる
Mountain fold along
the edge and flatten.

38



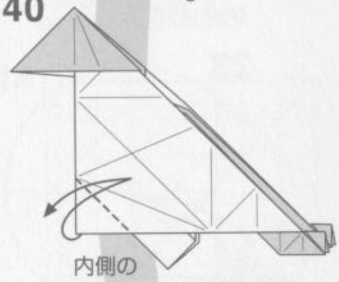
○のところで折り筋をつける
Fold at the circled point
and unfold.

39



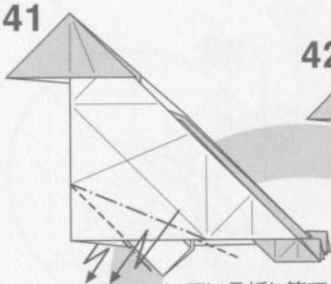
反対側も
34-38と同じように折る
Repeat 34-38 on the
other side.

40



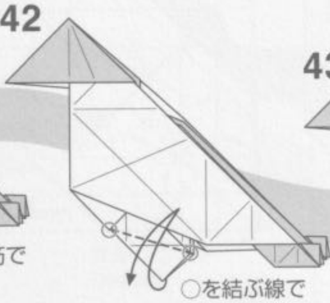
内側の
フチのところで折り筋をつける
Fold along the hidden edge
and unfold.

41



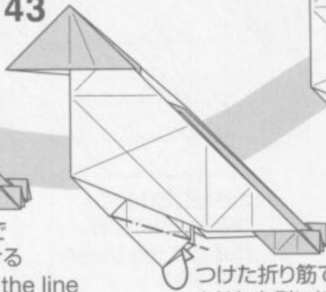
ついている折り筋で
内側に段折り
Crimp inside
using the creases.

42



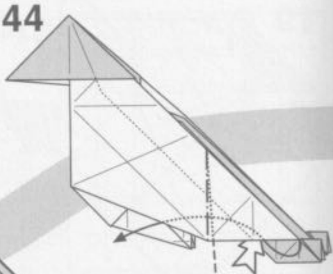
○を結ぶ線で
折り筋をつける
Fold along the line
connecting the
circled points
and unfold.

43



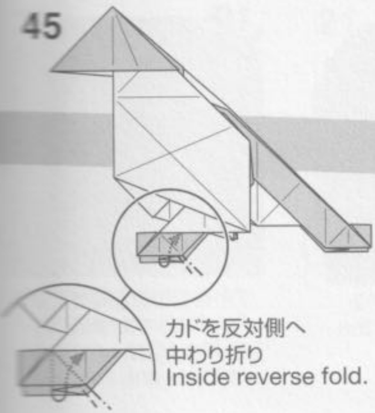
つけた折り筋で
カドを内側に折る
Fold the corner
to inside using
the creases.

44

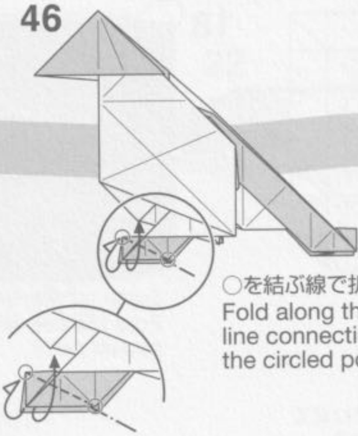


ついている折り筋で
中わり折り
Inside reverse fold
using the creases.

45

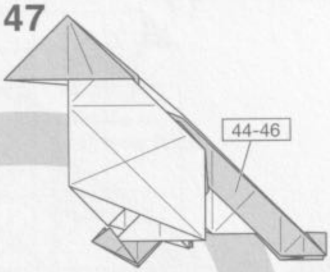


46



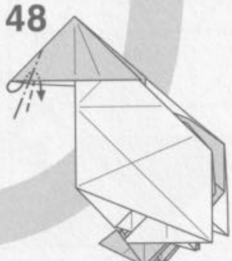
○を結ぶ線で折る
Fold along the line connecting the circled points.

47



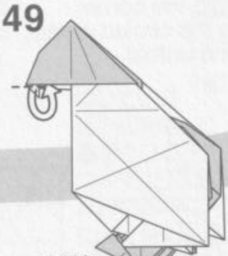
反対側も44-46と同じように折る
Repeat 44-46 on the other side.

48



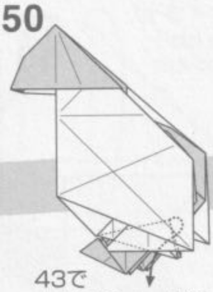
中わり折り
Inside reverse fold.

49



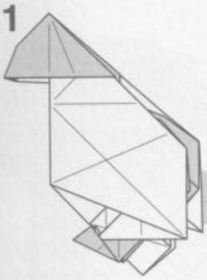
カドをすき間に折り込む
Fold the corner to inside.

50



43で内側に折ったカドを戻す
Unfold the corner folded at 43.

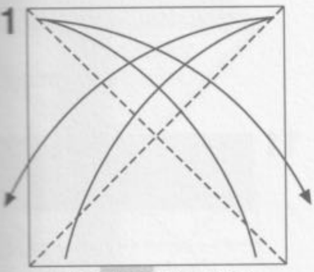
51



[腹側]できあがり
[Ventral Part] Completed.

[背側]
[Dorsal Part]

1



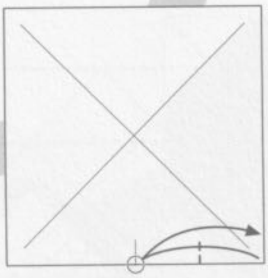
三角に折り筋をつける
Fold in halves and unfold.

2



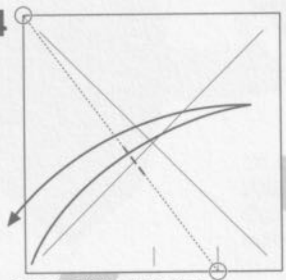
カドとカドを合わせてフチに印をつける
Fold corner to corner, but only mark on the edge. Unfold.

3



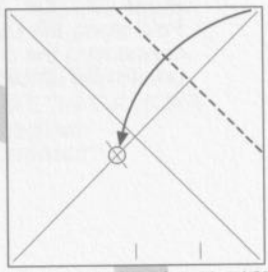
カドをつけた印に合わせてフチに印をつける
Fold the corner to the mark but only mark on the edge.

4



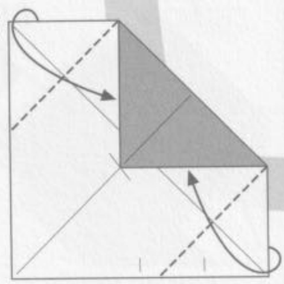
○を結ぶ線と折り筋の交点 印をつける
Mark at the intersection of the crease and the line connecting the circled points.

5

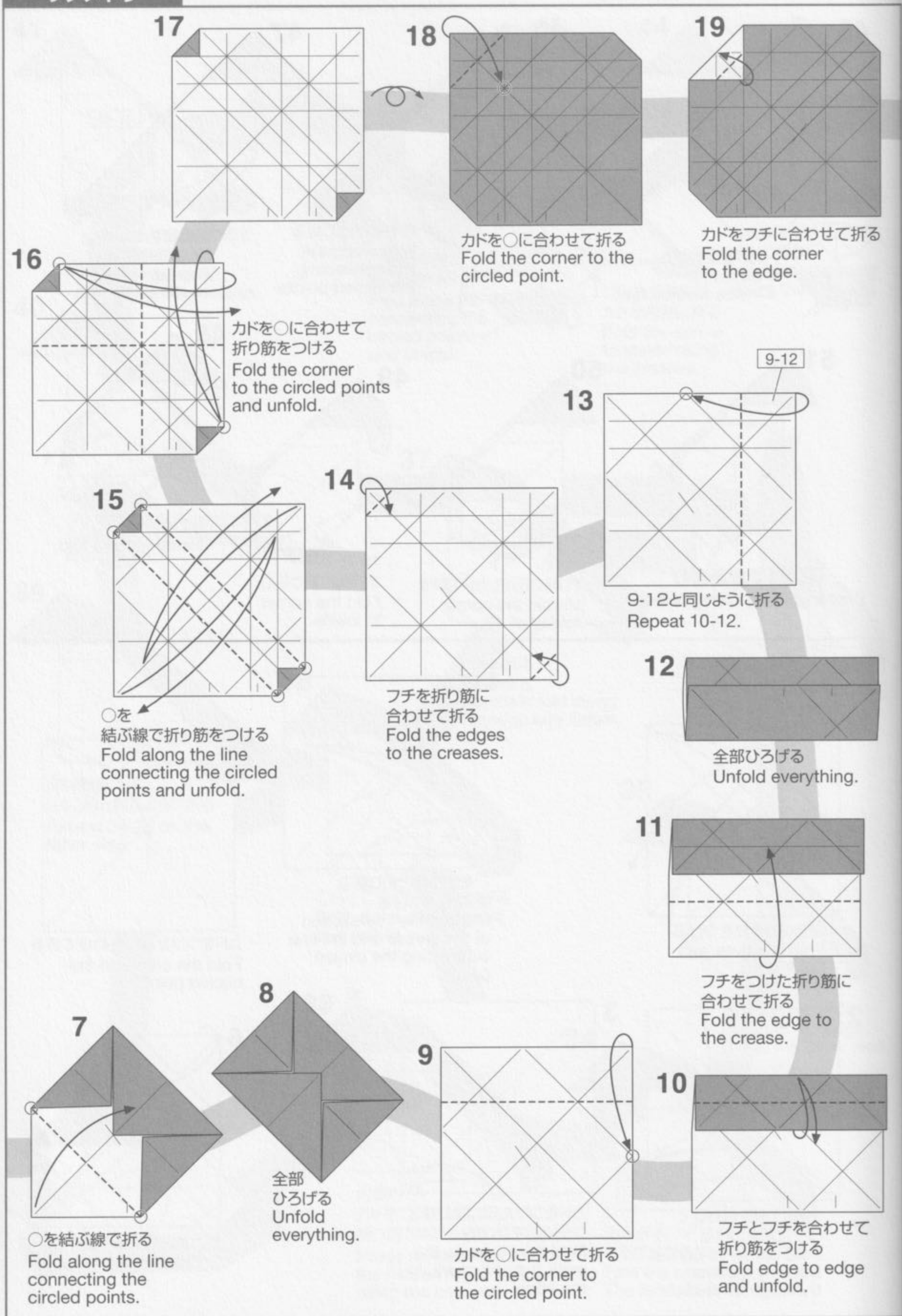


カドをつけた印に合わせて折る
Fold the corner to the circled point.

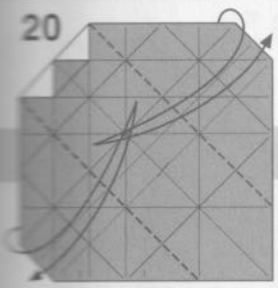
6



フチとフチを合わせて折る
Fold edge to edge.

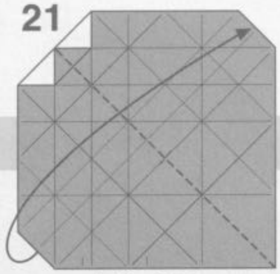

7
○を結ぶ線で折る
Fold along the line connecting the circled points.
8
全部ひろげる
Unfold everything.
9
カドを○に合わせて折る
Fold the corner to the circled point.
10
フチとフチを合わせて折り筋をつける
Fold edge to edge and unfold.
11
フチをつけた折り筋に合わせて折る
Fold the edge to the crease.
12
全部ひろげる
Unfold everything.
13
9-12
9-12と同じように折る
Repeat 10-12.
14
フチを折り筋に合わせて折る
Fold the edges to the creases.
15
○を結ぶ線で折り筋をつける
Fold along the line connecting the circled points and unfold.
16
カドを○に合わせて折り筋をつける
Fold the corner to the circled points and unfold.
17
18
カドを○に合わせて折る
Fold the corner to the circled point.
19
カドをフチに合わせて折る
Fold the corner to the edge.

20



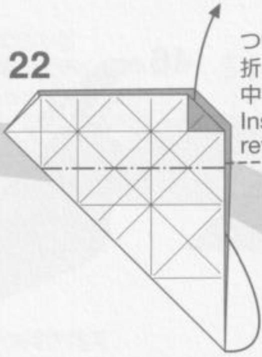
フチを折り筋に合わせて
折り筋をつける
Fold the edges to the
creases and unfold.

21



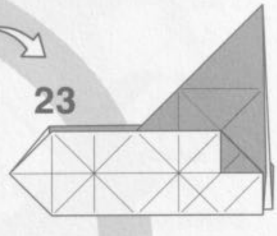
半分に折る
Fold in half.

22

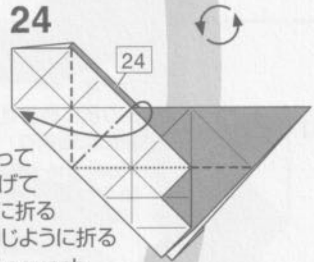


ついている
折り筋で
中わり折り
Inside
reverse fold.

23

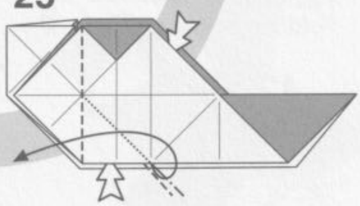


24



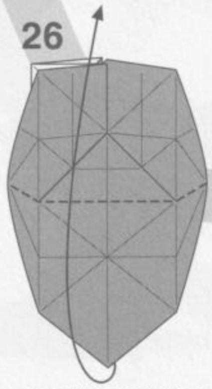
ついている
折り筋を使って
内側をひろげて
つぶすように折る
反対側も同じように折る
Open and squash
using the creases.
Repeat on the other side.

25



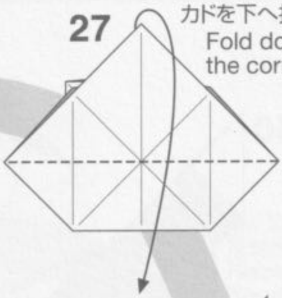
ついている折り筋を使って
内側をひろげてつぶすように折る
Open and squash
using the creases.

26



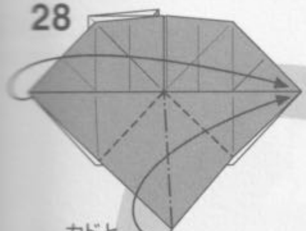
ついている折り筋で
カドを上へ折る
Fold up the flap
and flatten.

27



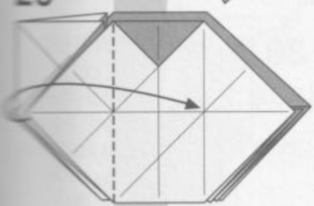
カドを下へ折る
Fold down
the corner.

28



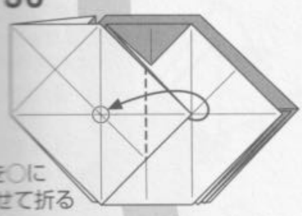
カドと
カドを合わせて
折りたたむ
Assemble using
the creases.

29



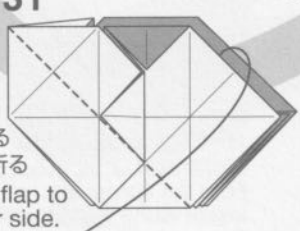
カドを反対側へ折る
Fold the flap
to the other side.

30



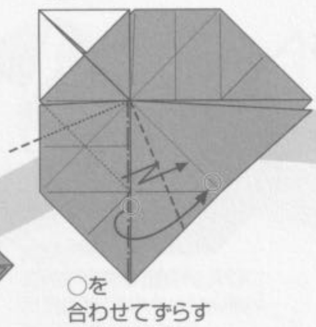
カドを○に
合わせて折る
Fold the corner
to the circled point.

31



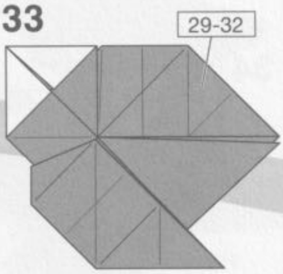
フチを
ついている
折り筋で折る
Fold the flap to
the other side.

32



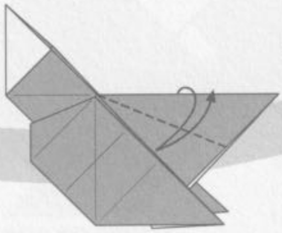
○を
合わせてずらす
ように段折り
Pleat edge to
crease.

33



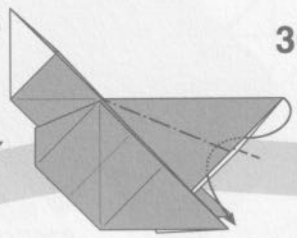
反対側も29-32と
同じように折る
Repeat 29-32
on the other side.

34



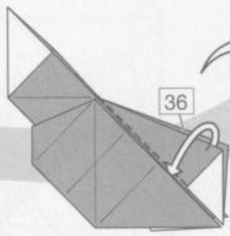
フチとフチを合わせて
折り筋をつける
Fold edge to edge
and unfold.

35



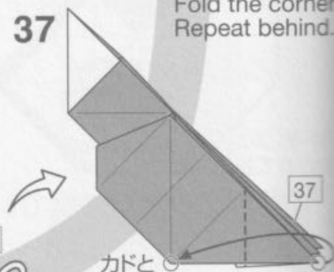
つけた折り筋で中わり折り
Inside reverse fold.

36



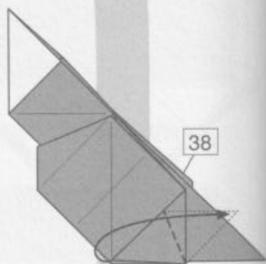
カドをすき間に折り込む
反対側も同じように折る
Fold the corner to
inside along the edge.
Repeat behind.

37



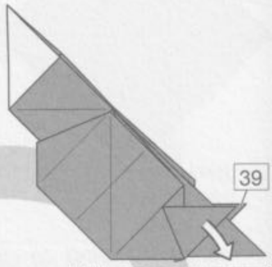
カドと○
カドを合わせて折る
反対側も同じように折る
Fold corner to corner.
Repeat behind.

38



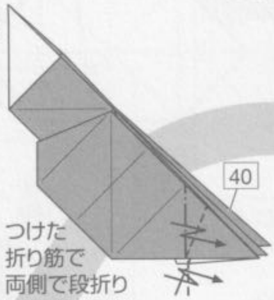
カドを横へ折る
反対側も同じ
Fold the corner.
Repeat behind.

39



カドを37の形まで戻す
反対側も同じ
Unfold. Repeat behind.

40



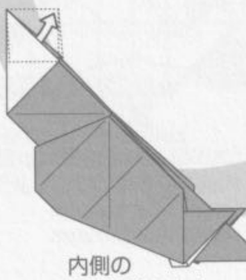
つけた
折り筋で
両側で段折り
反対側も同じ
Crimp inside.
Repeat behind.

41



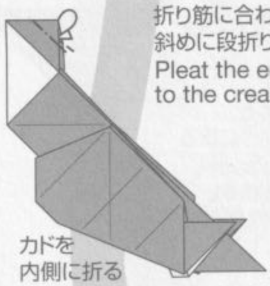
○のところでカドを
後ろへ折る
反対側も同じように折る
Mountain fold
at the circled point.
Repeat behind.

42



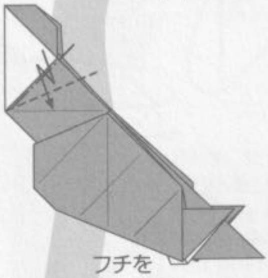
内側の
カドを引き出す
Pull out the corner.

43



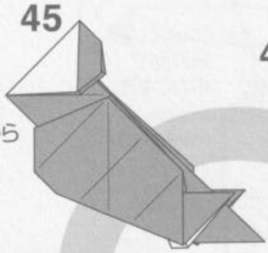
カドを
内側に折る
Fold the corner to inside.

44



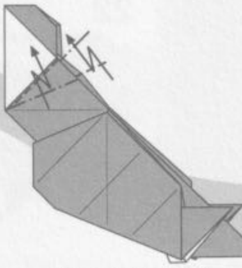
フチを
折り筋に合わせて
斜めに段折り
Pleat the edge
to the crease.

45



折り筋を
つけてから
戻す
Unfold.

46



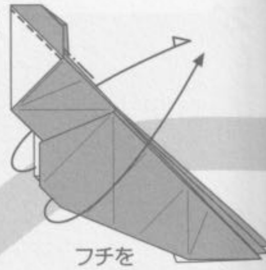
両側で斜めに段折り
Crimp inside.

47



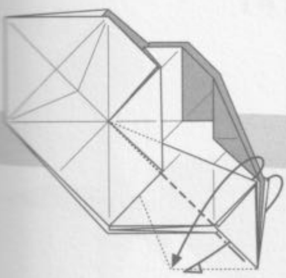
カドをそれぞれ戻す
Unfold the corners.

48



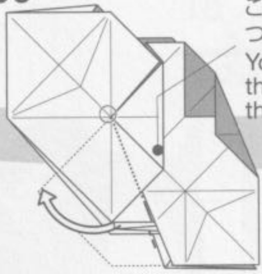
フチを
反対側へひろげる
Fold the flaps up.

49



カドを反対側へ折る
Fold the corner
to the other side.

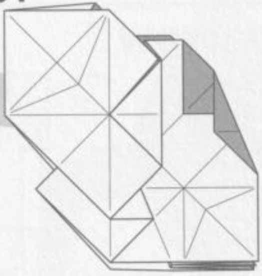
50



この辺りを
つまんでおくとよい
You may pinch
this part to keep
the model in shape.

中心のカドをつまんで
○を支点にずらすように
ひろげる
Pull out the middle
corner.

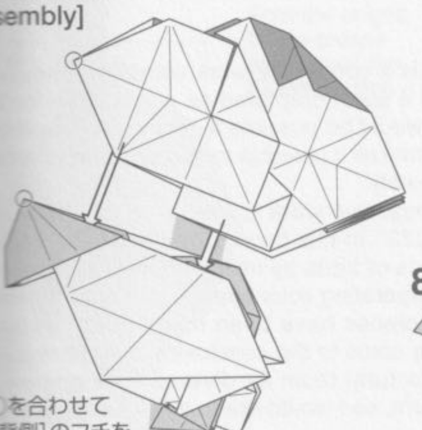
51



[背側] できあがり
[Dorsal Side] Completed.

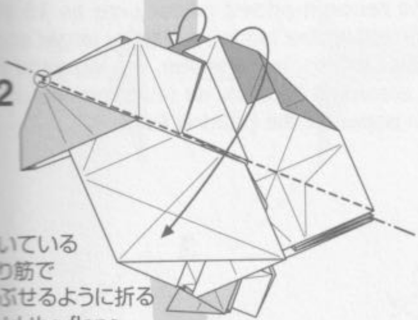
[組み立て方]
[Assembly]

1



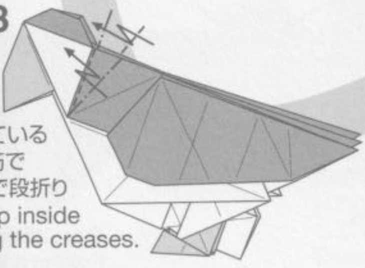
○を合わせて
[背側] のフチを
[腹側] の中心のすき間に差し込む
Insert the [Dorsal Part]
into the slit of [Ventral Part].

2



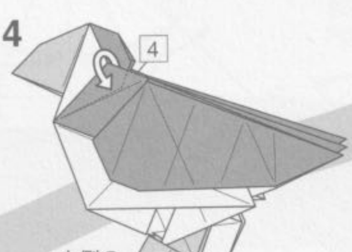
ついている
折り筋で
かぶせるように折る
Fold the flaps
to the other side.

3



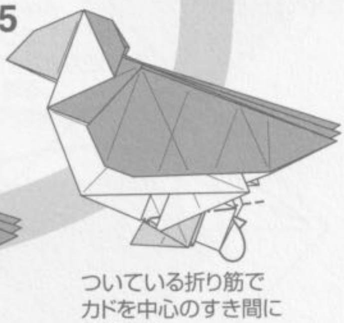
ついている
折り筋で
両側で段折り
Crimp inside
using the creases.

4



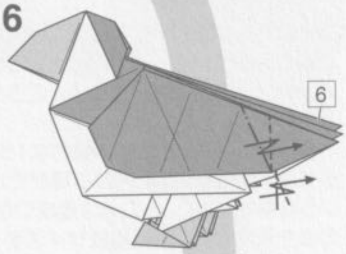
内側の
カドを手前に出す
反対側も同じ
Pull out the hidden
corner.
Repeat behind.

5



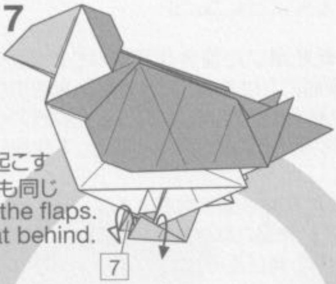
ついている折り筋で
カドを中心のすき間に
折り込む
Fold the corner inside
using the creases.

6



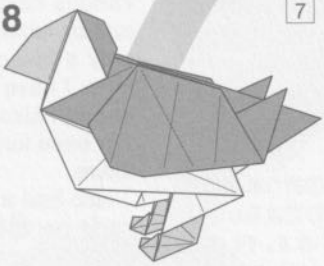
ついている折り筋で
両側で段折り
反対側も同じように折る
Crimp inside
using the creases.
Repeat behind.

7



カドを起こす
反対側も同じ
Raise the flaps.
Repeat behind.

8

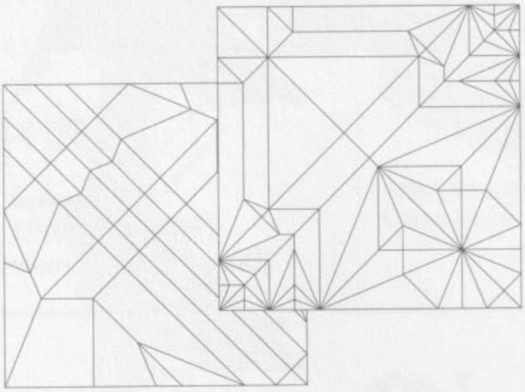


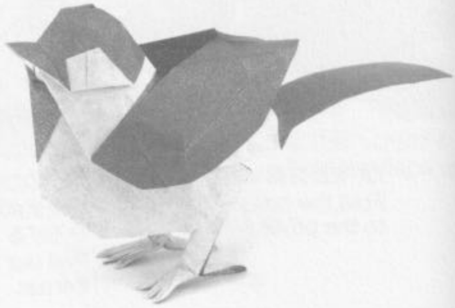
できあがり
Model completed.

スズメ

Sparrow

Created in 2020





推奨用紙 15cm

本作は2枚の用紙を用いた複合作品になりますが、パーツを背中側と腹側に分けることで様々な小鳥を折り分けできる「小鳥の基本形」が作れるのでは、というアイディアを発端としていて、そのテストケースとして完成しました。

アイディアだけを見れば本書に掲載されている[組み換え式ニワトリ]に近い作品となります。比率や色分けによって、様々な種類の小鳥が生み出せればよかったのですが、残念ながらそう上手くはいかないもので、まだ数点しかこの基本形からの作品はできていません。構造的な余裕が足りていないのだろうという結論に至っているので、またいつか基本形を作るところから再挑戦したいと思っています。

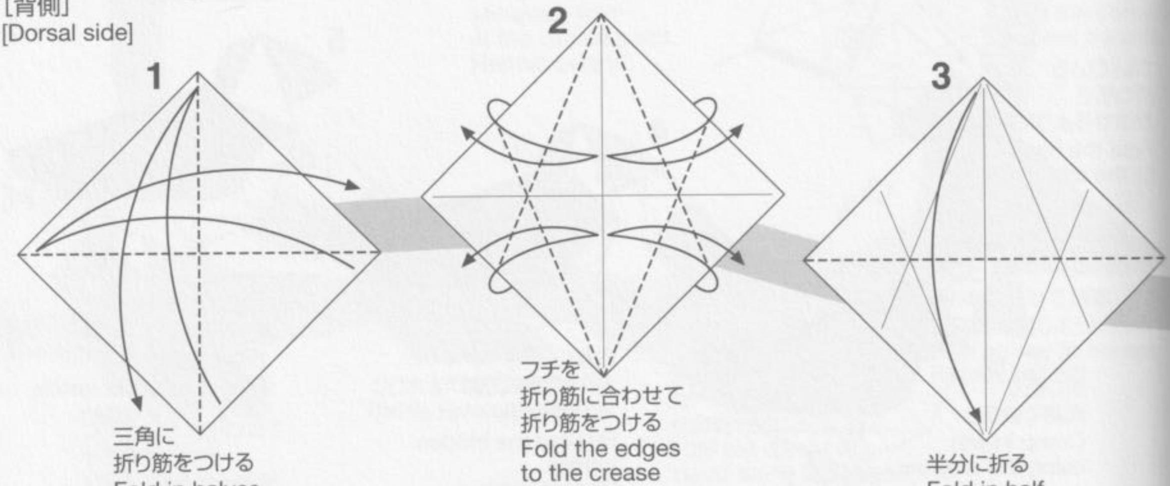
尚、この手法であれば一般的な15cmの折り紙用紙からちょうど手乗りサイズの小鳥ができるのではないかという目論見もあり、その点は達成できています。そしてその点を理由として推奨用紙サイズを15cmとしていますが、実際にはもう一回り程度大きい用紙の方が折りやすいかもしれません。特に、脚とその周辺は厚くなるので、[腹側]については比較的薄い紙を使うことをおすすめします。

This work is a composite work using two sheets of paper, and it was completed as a test case for the idea that it would be possible to fold out a "small-bird base" that makes it possible to fold dorsal and ventral sides separately.

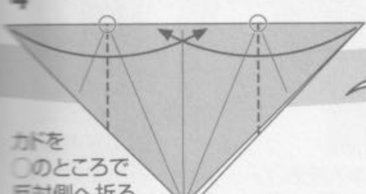
In this sense, this work is similar to the "Modular Chicken 2022" in this book. I had hoped to design various kinds of birds by using different proportions and by incorporating color change, but unfortunately, only a few pieces have been made from this base form. I have come to the conclusion that there is not enough structural room for diverse development in this base form, so I would like to try remaking it in the future.

I also had a plan to use this method to make a small hand-perching bird from a standard 15 cm sheet of origami paper, and I succeeded on that point. That is why I set the recommended paper size as 15 cm. When you try folding the model, a slightly larger sheet might be easier to fold. In particular, the legs and the surrounding areas will be thick, so I recommend using relatively thin paper for the [Ventral Part].

[背側]
[Dorsal side]



4



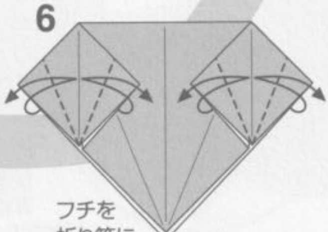
カドを
○のところで
反対側へ折る
Fold the corners
at the circled points.

5



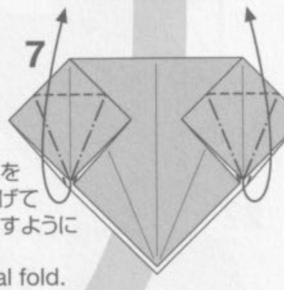
内側を
ひろげて
つぶすように折る
Open and squash.

6



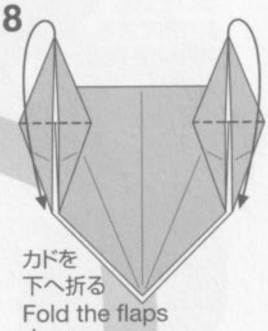
フチを
折り筋に
合わせて折り筋をつける
Fold the edges to the
creases and unfold.

7



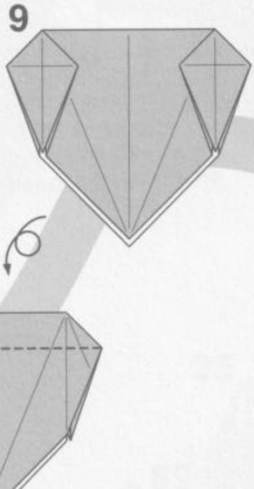
内側を
ひろげて
つぶすように
折る
Petal fold.

8

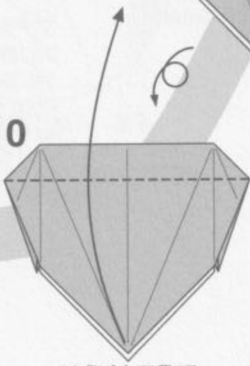


カドを
下へ折る
Fold the flaps
down.

9

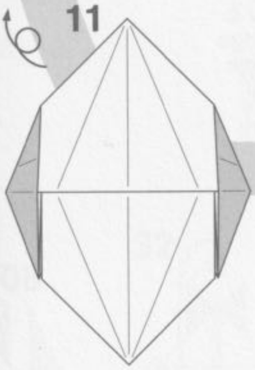


10

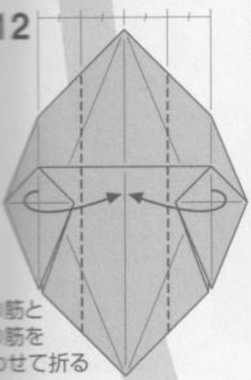


ひらくところで
上へ折る
Fold the flap up.

11

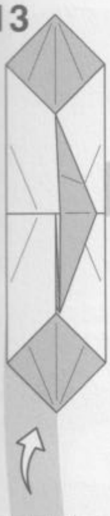


12

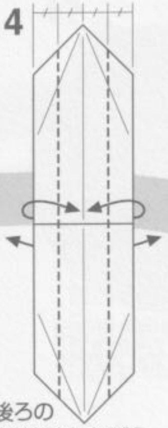


折り筋と
折り筋を
合わせて折る
Fold crease
to crease.

13

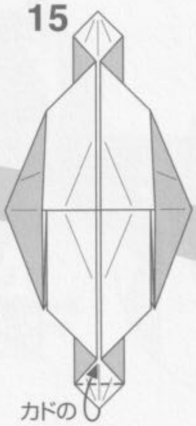


14



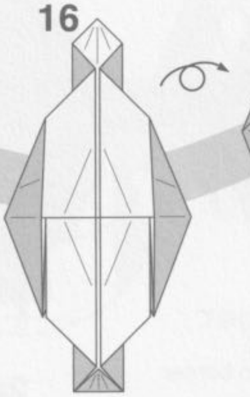
後ろの
カドを出しながら
フチを折り筋に
合わせて折る
Fold the edges
to the crease
and swivel the
hidden layers.

15

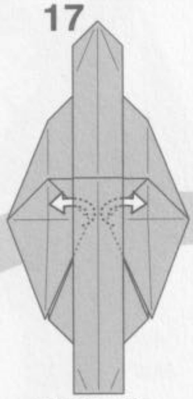


カドの
ところで折る
Fold the corner
up.

16

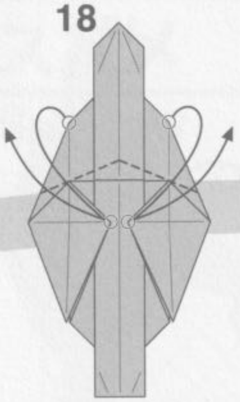


17



内側のカドを
手前に出す
Pull out the
hidden corners.

18

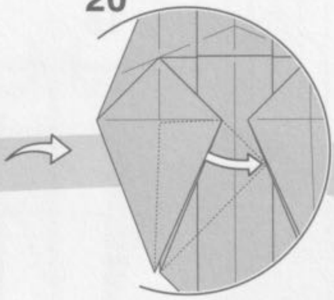


カドとカドを合わせて
折り筋をつける
Fold corner to corner and unfold.

19

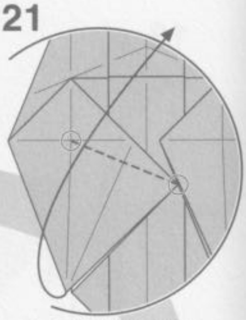


20



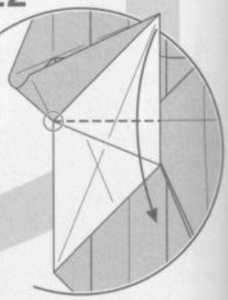
内側のカドを引き出す
Pull out the layers.

21



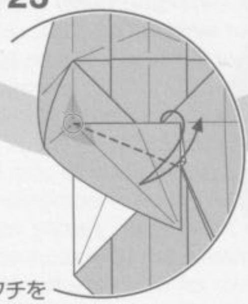
○を結ぶ線で折る
平らにはならない
Fold along the line connecting the circled points.

22



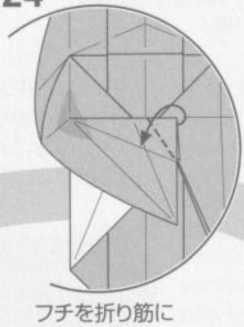
○のところで
下へ折る
Fold down at the circled point.

23



フチを
折り筋に合わせて
折り筋をつける
Fold the edge to the crease and unfold.

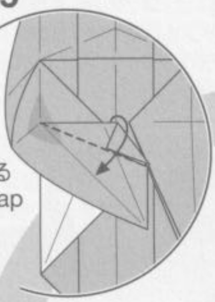
24



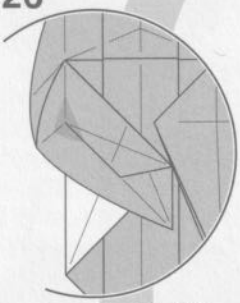
フチを折り筋に
合わせて折る
Fold the edge to the crease.

25

ついている
折り筋で折る
Fold the flap down.

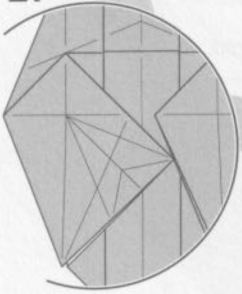


26

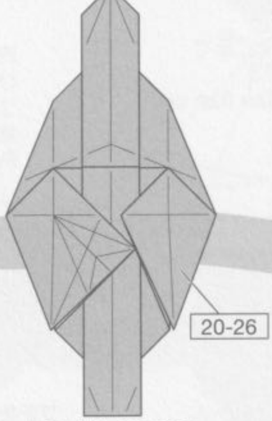


21の形までひろげる
Unfold to 21.

27

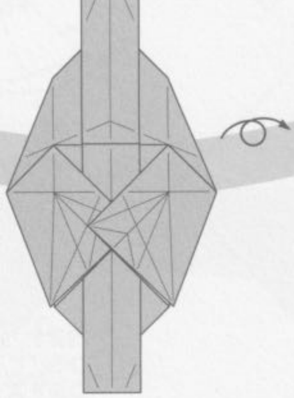


28

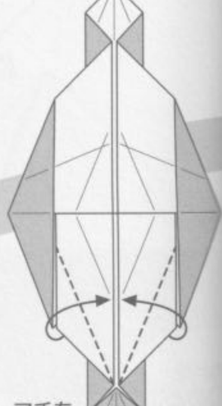


反対側も20-26と
同じように折る
Repeat 20-26 on the other side.

29



30



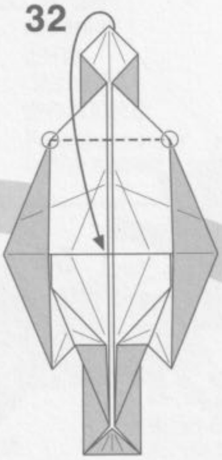
フチを
中心に合わせて折る
Fold edge to edge.

31



ついている折り筋で
まとめて折って
折り筋をつけ直す
Fold all the layers
along the crease
and unfold.

32

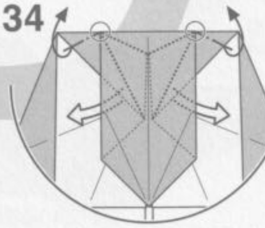


○を結ぶ線で下へ折る
Fold the corner down
at the circled points.

33

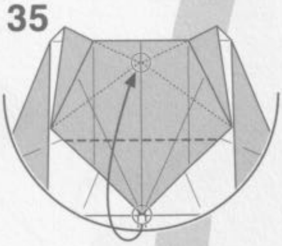


34



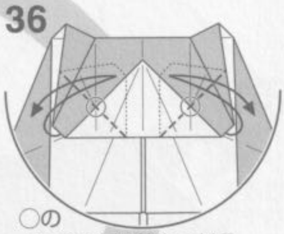
○を支点にずらすようにして
フチを引き出す
Pull out the hidden layers.

35



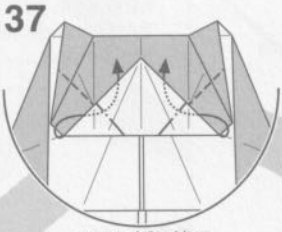
カドを内側の○に
合わせて折る
Fold the corner
to the circled point.

36



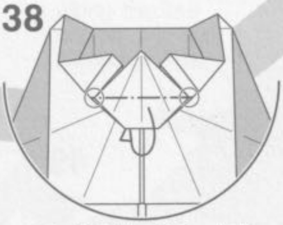
○の
ところで折り筋をつける
Fold and unfold
at the circled points.

37



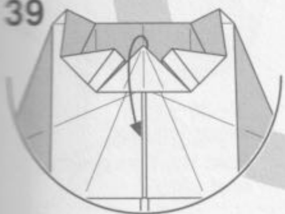
つけた折り筋で
中わり折り
Inside reverse
fold using the
creases.

38



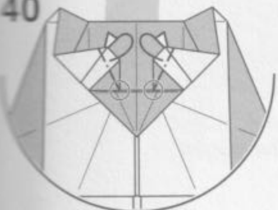
○を結ぶ線で後ろへ折る
Mountain fold the edge
along the line connecting
the circled points

39



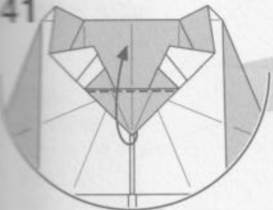
カドを下へひろげる
Unfold.

40



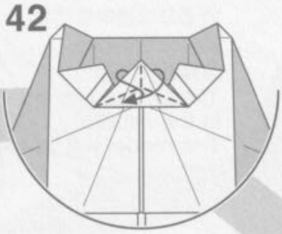
○のところで
斜めに後ろへ折る
Mountain fold
at the circled points.

41



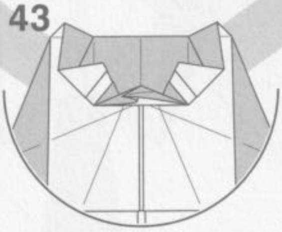
カドを戻す
Fold up the corner.

42

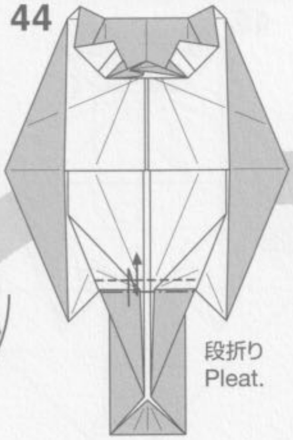


カドをつまむように折る
つまんだカドは
倒さないようにする
Fold like a rabbit-ear,
but don't flatten the
flap at the center.

43

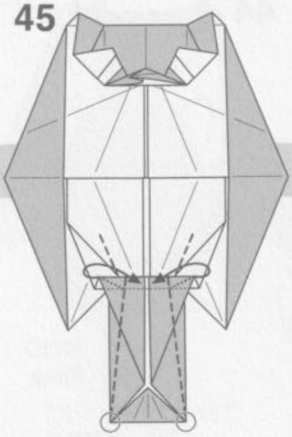


44



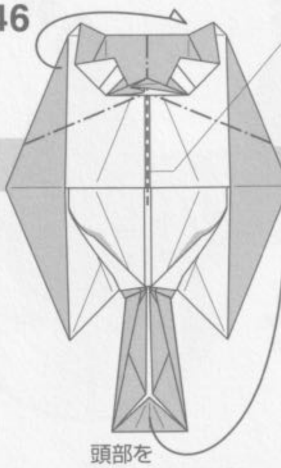
段折り
Pleat.

45



○のところから
斜めに折って
起き上がってきた部分を
つぶすように折る
Valley fold at the
circled points.
Squash the lower parts
of the raised edges.

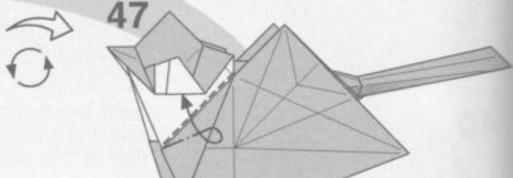
46



折るのは途中までで
胴体は途中から
立体的になる
The crease line ends
in the middle.
The model will be 3-D.

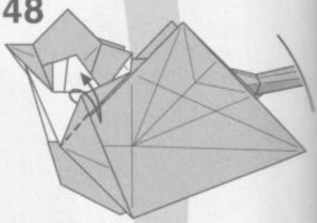
頭部を
半分に折りながら
ついている折り筋で
中わり折りのように折る
Mountain fold the head,
While inside reverse folding
the body.

47



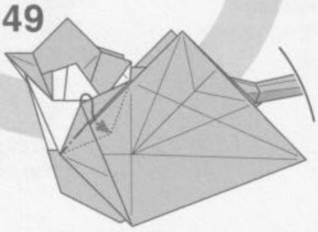
フチの
ところで
ひろげてつぶすように折る
Fold along the edges
and squash.

48



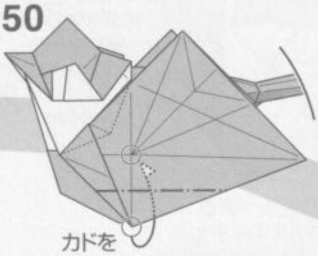
下へ折って
折り筋をつける
Fold the flap down
and unfold.

49



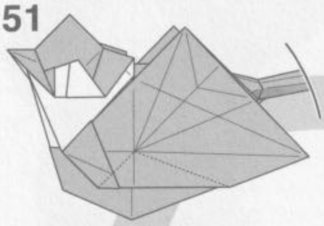
すき間に中わり折り
Fold the corner
to inside.

50



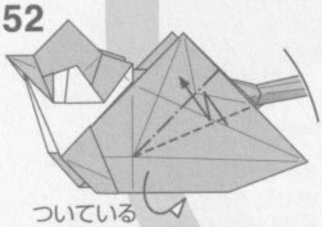
カドを
丸に合わせて後ろへ折る
Mountain fold the corner
to the circled point.

51



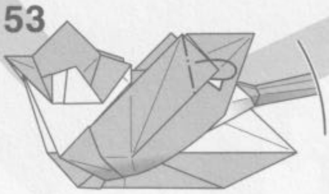
反対側も47-50と
同じように折る
Repeat 47-50
behind.

52



ついている
折り筋で斜めに段折り
立体になる
Pleat using
the creases.

53



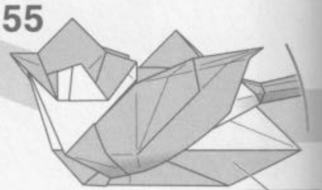
ついている折り筋で
カドを後ろへ折る
Mountain fold
along the crease.

54



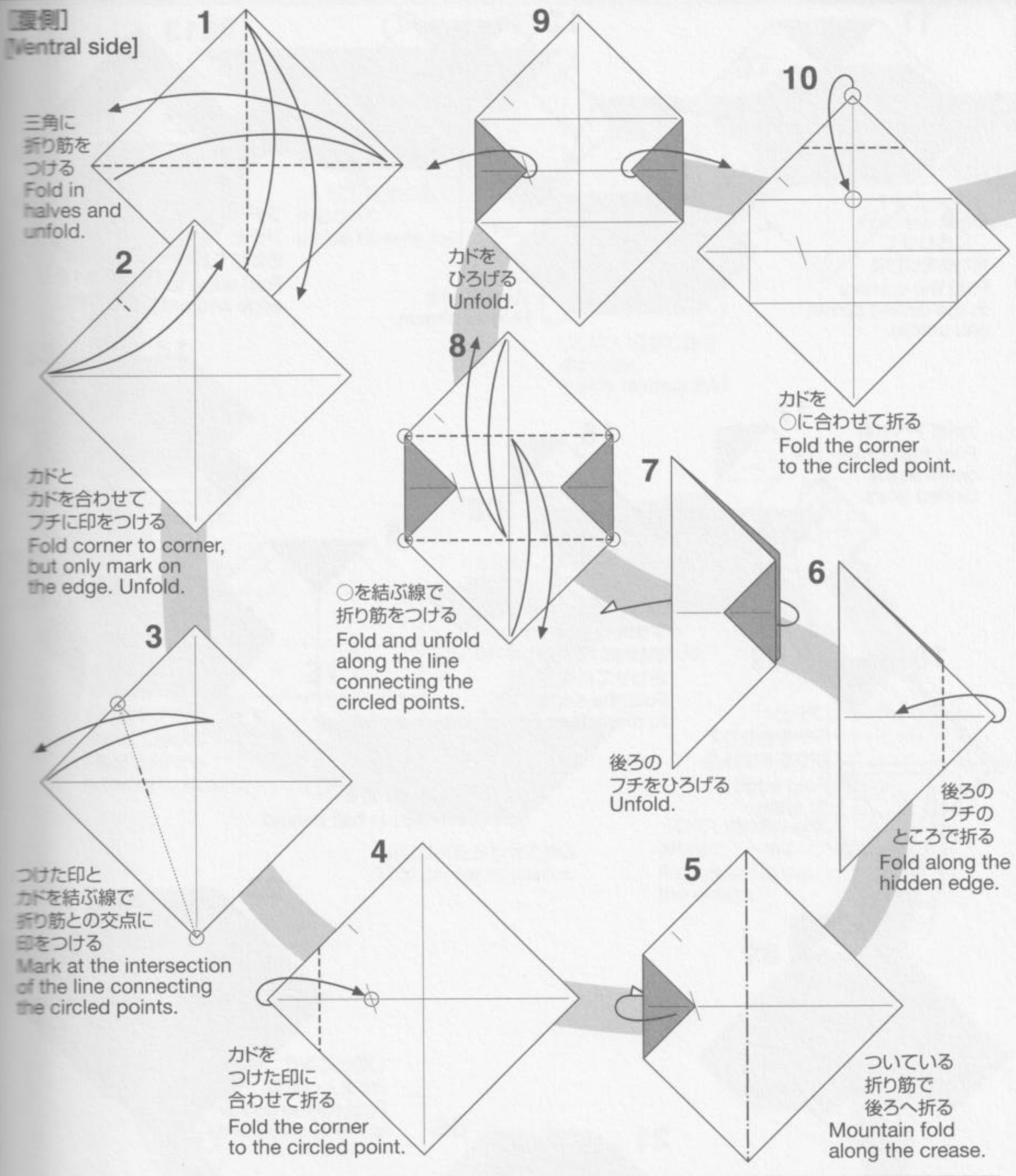
○のところで
後ろへ曲げるように折る
Mountain fold
at the circled point.

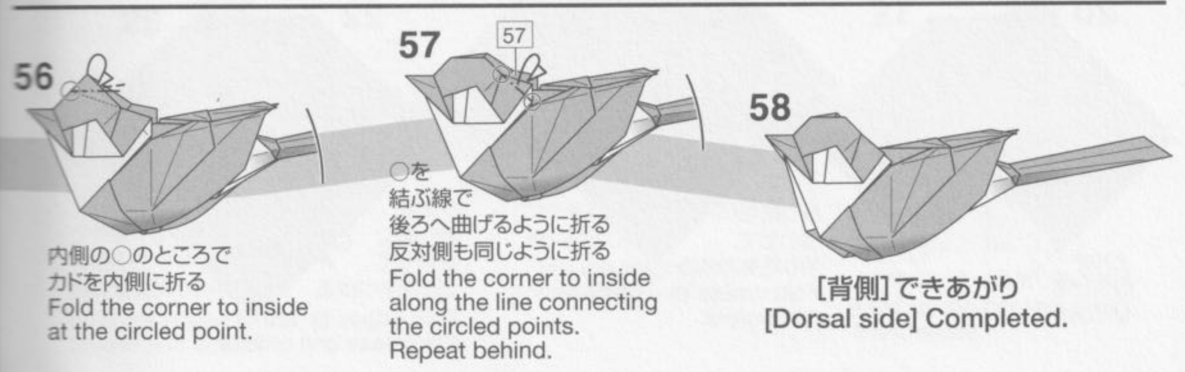
55



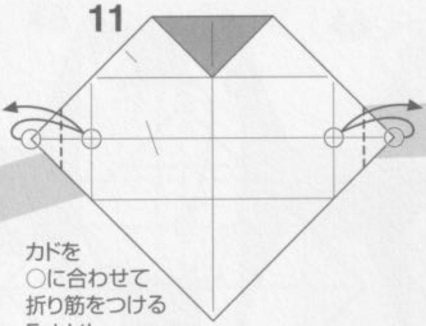
反対側も52-54と
同じように折る
Repeat 52-54
behind.

52-54


[腹側]
[Ventral side]
1
三角に
折り筋を
つける
Fold in
halves and
unfold.
2
カドと
カドを合わせて
フチに印をつける
Fold corner to corner,
but only mark on
the edge. Unfold.
3
つけた印と
カドを結ぶ線で
折り筋との交点に
印をつける
Mark at the intersection
of the line connecting
the circled points.
4
カドを
つけた印に
合わせて折る
Fold the corner
to the circled point.
5
ついている
折り筋で
後ろへ折る
Mountain fold
along the crease.
6
後ろの
フチの
ところで折る
Fold along the
hidden edge.
7
後ろの
フチをひろげる
Unfold.
8
○を結ぶ線で
折り筋をつける
Fold and unfold
along the line
connecting the
circled points.
9
カドを
ひろげる
Unfold.
10
カドを
○に合わせて折る
Fold the corner
to the circled point.

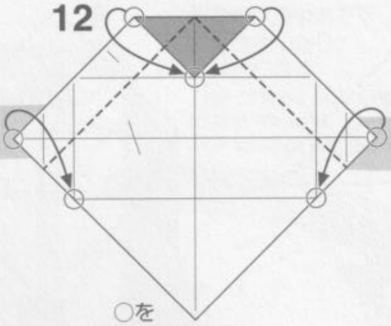

56
内側の○のところで
カドを内側に折る
Fold the corner to inside
at the circled point.
57
57
○を
結ぶ線で
後ろへ曲げるように折る
反対側も同じように折る
Fold the corner to inside
along the line connecting
the circled points.
Repeat behind.
58
[背側]できあがり
[Dorsal side] Completed.

11



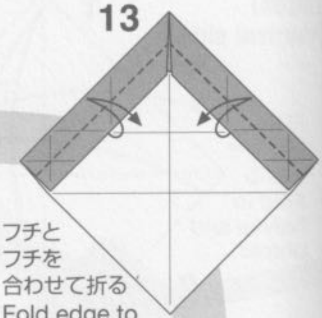
カドを
○に合わせて
折り筋をつける
Fold the corners
to the circled points
and unfold.

12



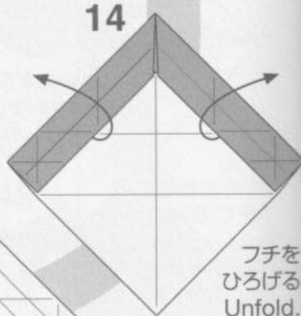
○を
合わせて折る
Fold as shown.

13



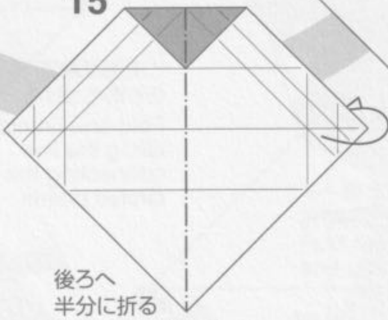
フチと
フチを
合わせて折る
Fold edge to
edge and unfold.

14



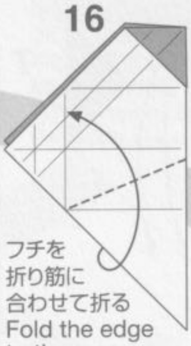
フチを
ひろげる
Unfold.

15



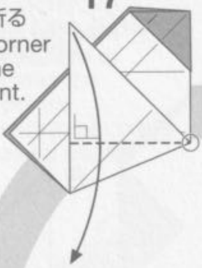
後ろへ
半分に折る
Fold in half behind.

16



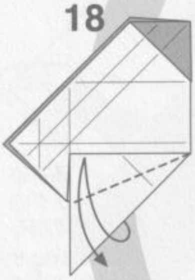
フチを
折り筋に
合わせて折る
Fold the edge
to the crease.

17



カドを下へ折る
Fold the corner
down at the
circled point.

18



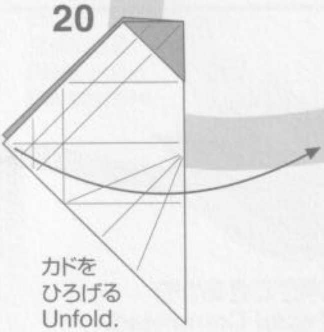
フチと
フチを合わせて
折り筋をつける
Fold edge
to edge
and unfold.

19



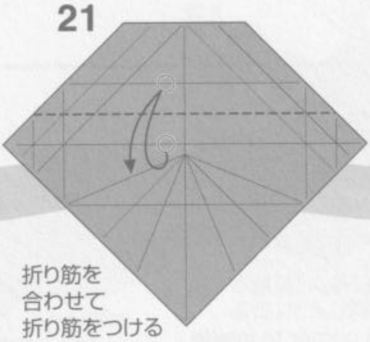
カドを戻す
Unfold.

20



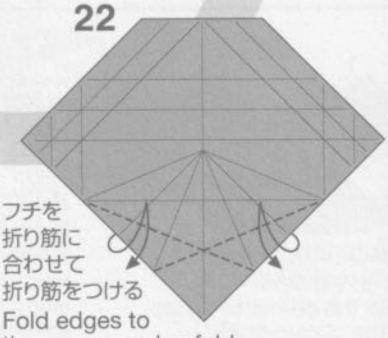
カドを
ひろげる
Unfold.

21



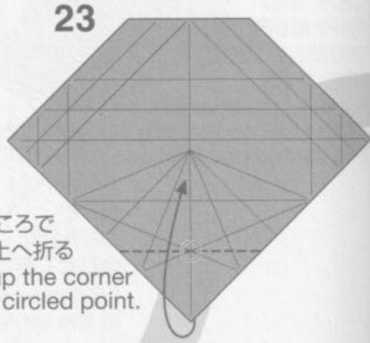
折り筋を
合わせて
折り筋をつける
Fold crease to crease
and unfold.

22



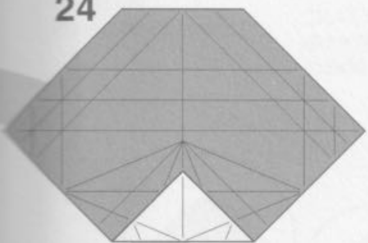
フチを
折り筋に
合わせて
折り筋をつける
Fold edges to
the crease and unfold.

23

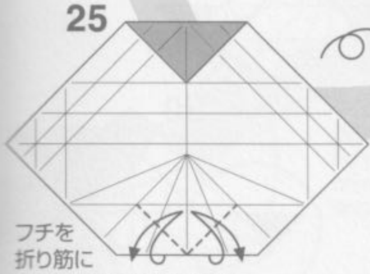


○のところで
カドを上へ折る
Fold up the corner
at the circled point.

24

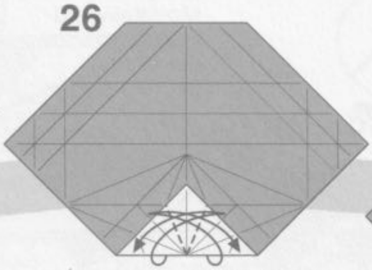


25



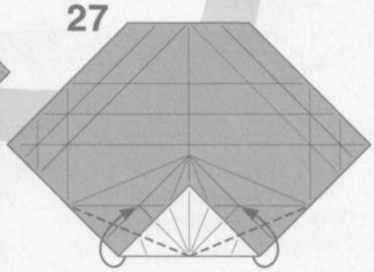
フチを
折り筋に
合わせて折り筋をつける
Fold the edges to the crease and unfold.

26



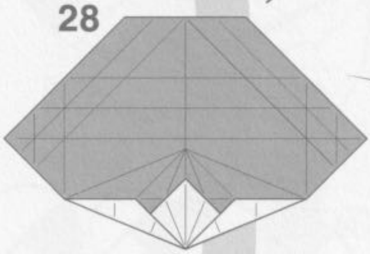
フチを折り筋に合わせて
折り筋をつける
Fold the edges to the creases and unfold.

27

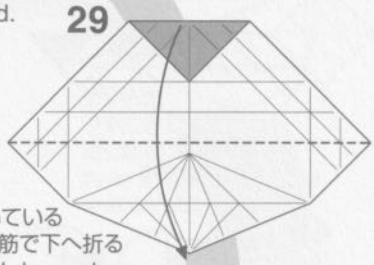


カドをついている折り筋で折る
Fold up the corners along the creases.

28

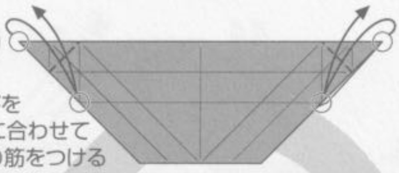


29



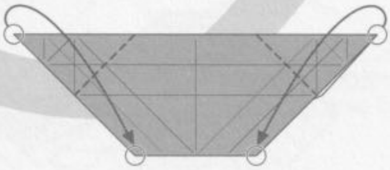
ついている
折り筋で下へ折る
Fold down along the crease.

30



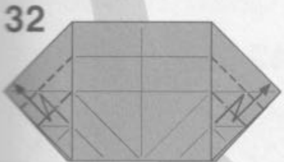
カドを
○に合わせて
折り筋をつける
Fold the corners to the circled points and unfold.

31



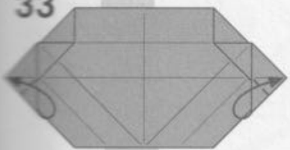
カドとカドを合わせて折る
Fold corner to corner.

32



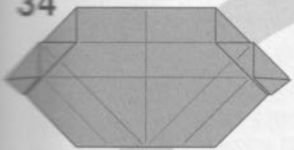
折り筋をフチに
合わせて段折り
Pleat fold the creases to edges.

33



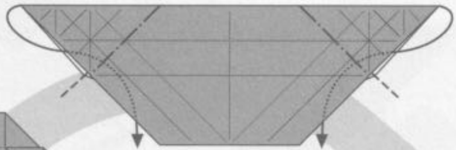
カドとカドを合わせて折る
Fold corner to corner.

34



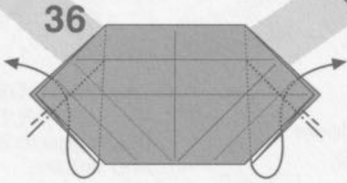
31の形まで戻す
Unfold to 31.

35



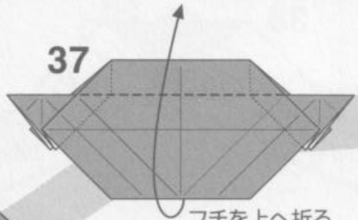
ついている折り筋で
中わり折り
Inside reverse fold.

36



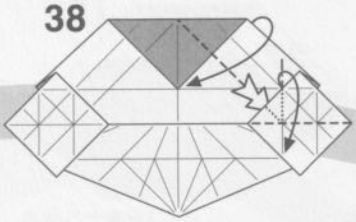
ついている折り筋で
中わり折り
Inside reverse fold.

37



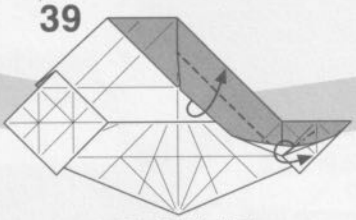
フチを上へ折る
Fold the flap up.

38



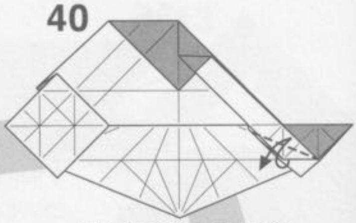
ついている折り筋で
すき間をひろげて
つぶすように折る
Fold the corner down
and squash using
the creases.

39



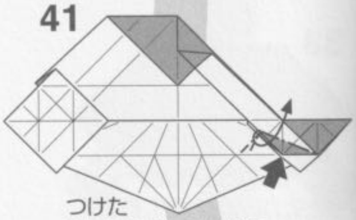
ついている折り筋で
平らに折りたたむ
Fold edge to edge
and flatten.

40



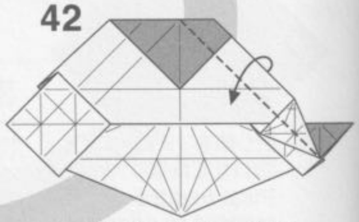
フチとフチを合わせて
折り筋をつける
Fold edge to edge
and unfold.

41



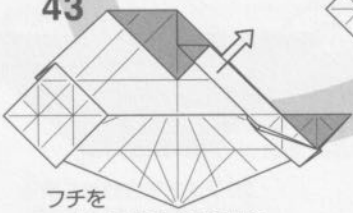
つけた
折り筋を使ってカドを
ひろげてつぶすように折る
Spread sink the corner.

42



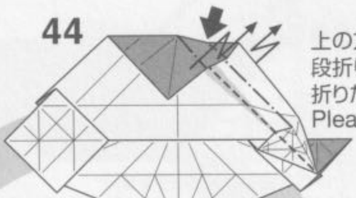
ついている折り筋で折る
Fold along the crease.

43



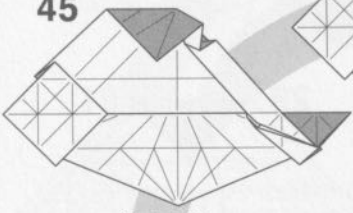
フチを
つまんでかるくひろげる
Unfold the layer.

44



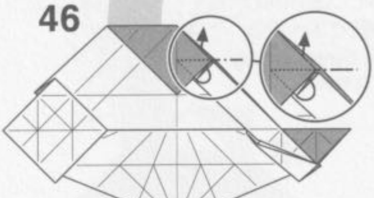
上の方を両側で
段折りするようにして
折りたたむ
Pleat on both sides.

45



途中の図
In progress....

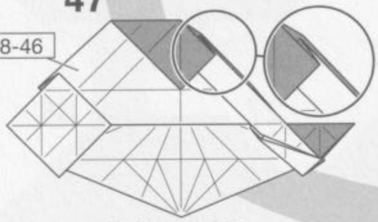
46



中わり折り
Inside reverse fold.

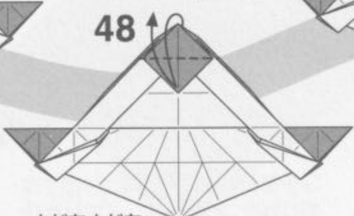
47

38-46



反対側も38-46と
同じように折る
Repeat 38-46
on the other side.

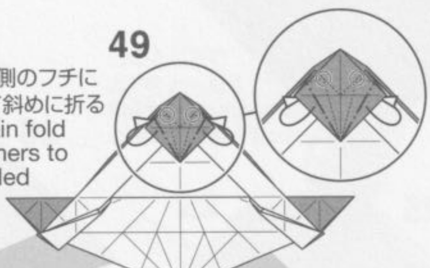
48



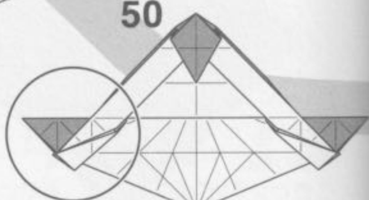
カドをカドを
合わせて折り筋をつける
Fold corner to corner
and unfold.

49

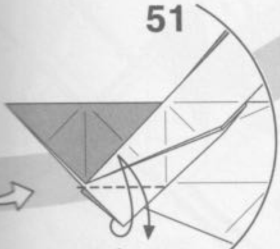
カドを内側のフチに
合わせて斜めに折る
Mountain fold
the corners to
the circled
points.



50



51



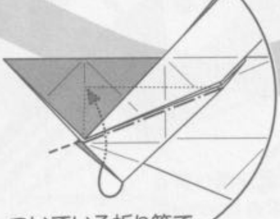
フチとフチを合わせて
折り筋をつける
Fold edge to edge
and unfold.

52



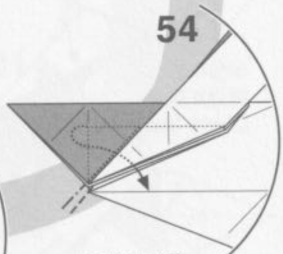
半分の角度で
折り筋をつける
Fold angle
bisectors
and unfold.

53



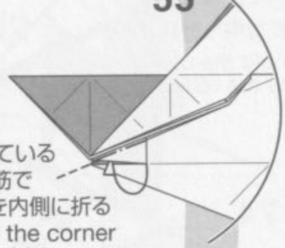
ついている折り筋で
中わり折り
Inside reverse fold.

54



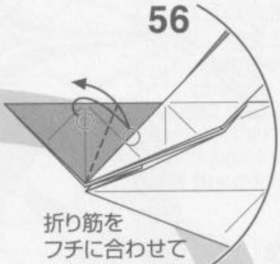
ついている
折り筋で中わり折り
Inside reverse fold.

55



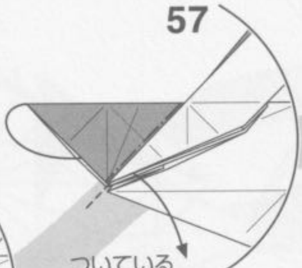
ついている
折り筋で
カドを内側に折る
Fold the corner
to inside.

56



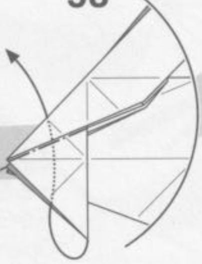
折り筋を
フチに合わせて
折り筋をつける
Fold an angle bisector
and unfold.

57



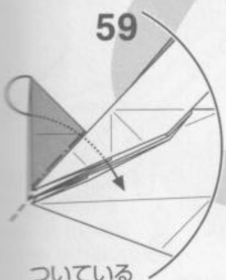
ついている
折り筋で中わり折り
Inside reverse fold.

58



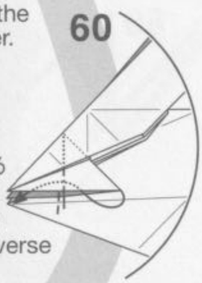
ついている折り筋で
中わり折り
Inside reverse fold.

59



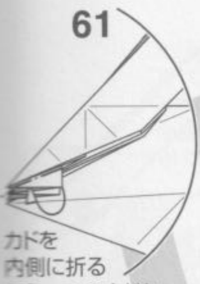
ついている
折り筋で中わり折り
Inside reverse fold.

60



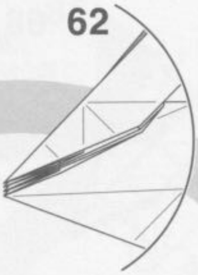
ついている
折り筋で
中わり折り
Inside reverse
fold.

61

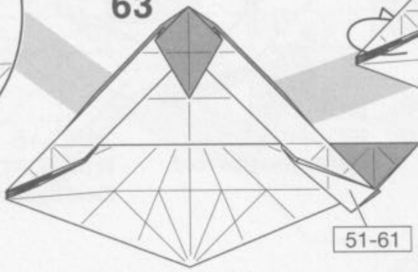


カドを
内側に折る
もう一つのカドも
同じように折る
Fold the corner
to inside.
Repeat on the
other corner.

62

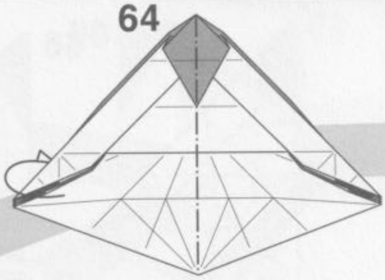


63

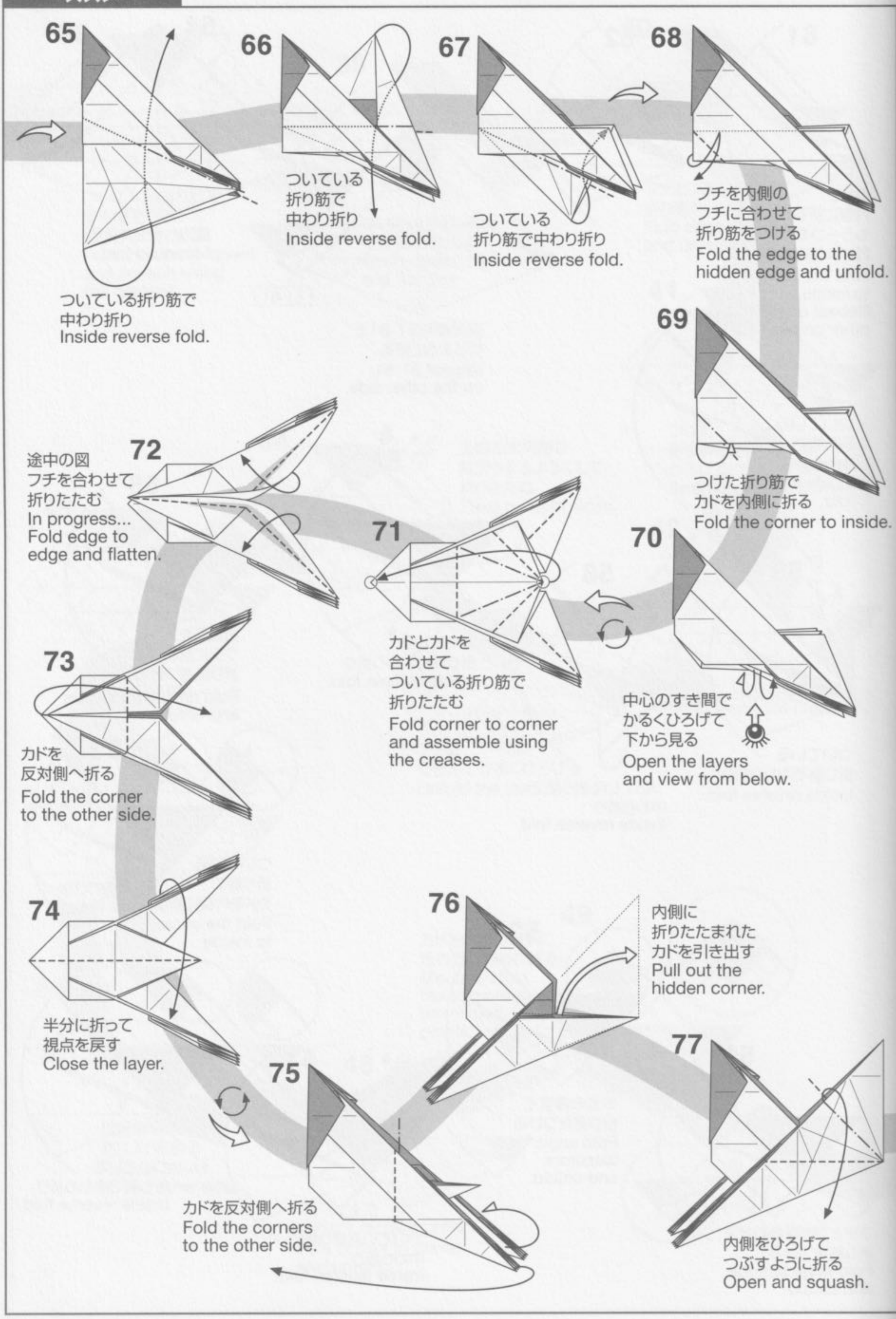


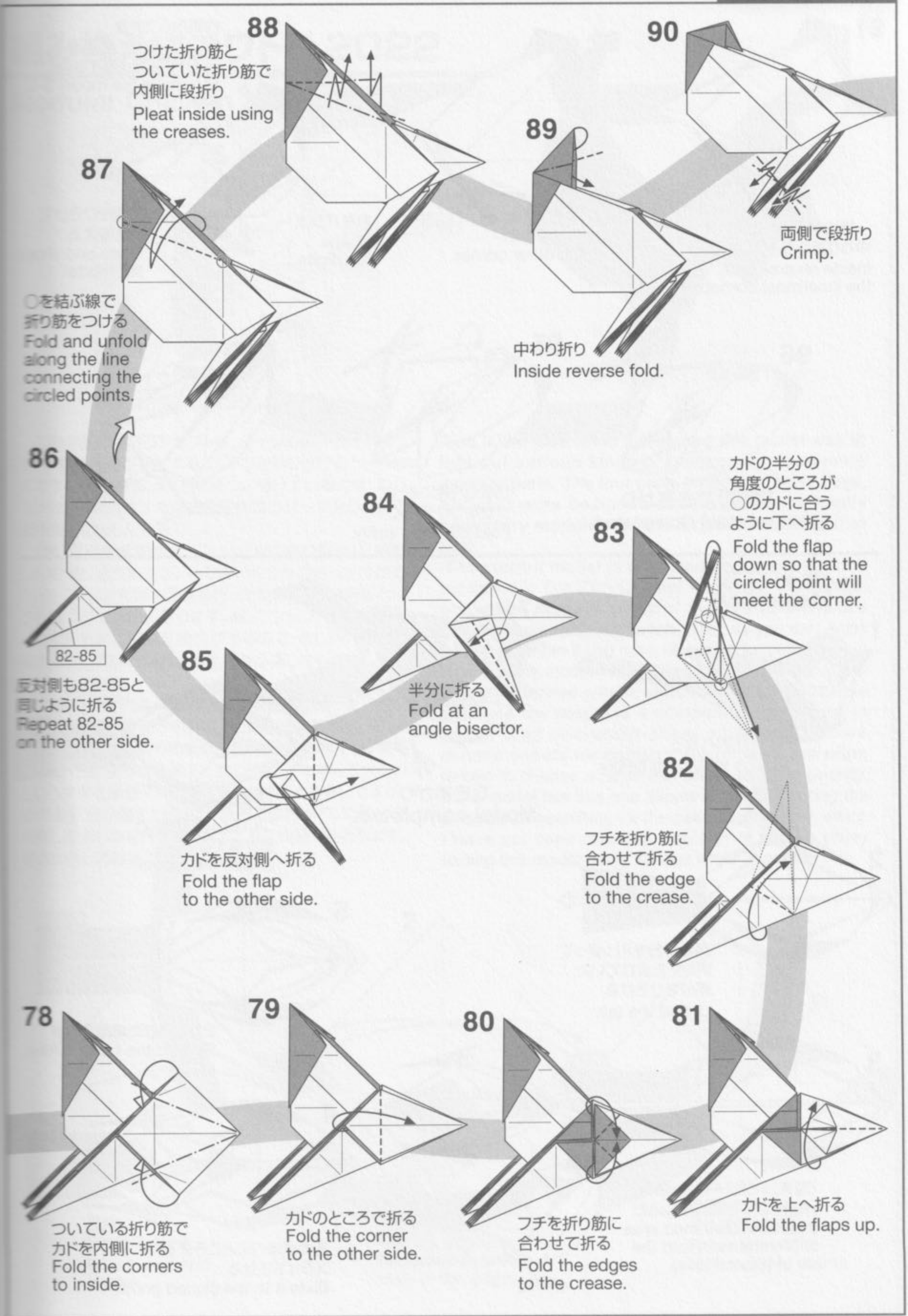
反対側も51-61と
同じように折る
Repeat 51-61
on the other side.

64

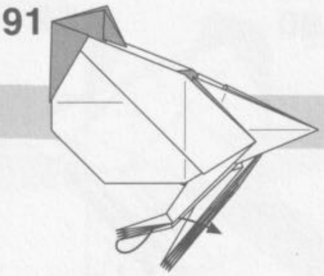


後ろへ半分に折る
Mountain fold.


65
ついている折り筋で
中わり折り
Inside reverse fold.
66
ついている
折り筋で
中わり折り
Inside reverse fold.
67
ついている
折り筋で中わり折り
Inside reverse fold.
68
フチを内側の
フチに合わせて
折り筋をつける
Fold the edge to the
hidden edge and unfold.
69
つけた折り筋で
カドを内側に折る
Fold the corner to inside.
70
中心のすき間で
かるくひろげて
下から見る
Open the layers
and view from below.
71
カドとカドを
合わせて
ついている折り筋で
折りたたむ
Fold corner to corner
and assemble using
the creases.
72
途中の図
フチを合わせて
折りたたむ
In progress...
Fold edge to
edge and flatten.
73
カドを
反対側へ折る
Fold the corner
to the other side.
74
半分に折って
視点を戻す
Close the layer.
75
カドを反対側へ折る
Fold the corners
to the other side.
76
内側に
折りたたまれた
カドを引き出す
Pull out the
hidden corner.
77
内側をひろげて
つぶすように折る
Open and squash.

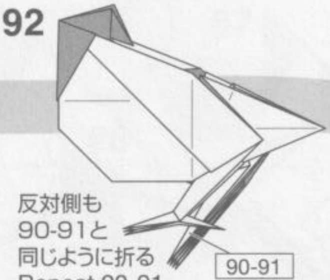

78
ついている折り筋でカドを内側に折る
Fold the corners to inside.
79
カドのところで折る
Fold the corner to the other side.
80
フチを折り筋に合わせて折る
Fold the edges to the crease.
81
カドを上へ折る
Fold the flaps up.
82
フチを折り筋に合わせて折る
Fold the edge to the crease.
83
カドの半分の角度のところが○のカドに合うように下へ折る
Fold the flap down so that the circled point will meet the corner.
84
半分に折る
Fold at an angle bisector.
85
カドを反対側へ折る
Fold the flap to the other side.
86
82-85
反対側も82-85と同じように折る
Repeat 82-85 on the other side.
87
○を結ぶ線で折り筋をつける
Fold and unfold along the line connecting the circled points.
88
つけた折り筋とついていた折り筋で内側に段折り
Pleat inside using the creases.
89
中わり折り
Inside reverse fold.
90
両側で段折り
Crimp.

91



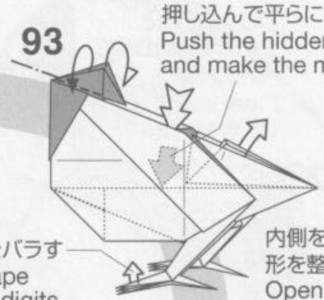
一番内側のカドを反対側へ
中わり折りのように折る
Inside reverse fold
the innermost corner.

92



反対側も
90-91と
同じように折る
Repeat 90-91
on the other corner.

93

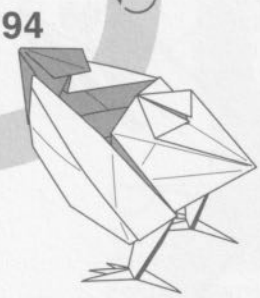


内側からフチを
押し込んで平らにする
Push the hidden layer
and make the model 3-D.

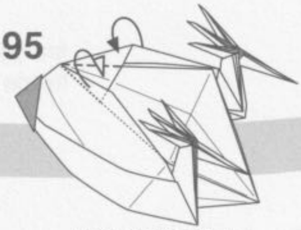
趾をバラす
Shape
the digits.

内側をひろげて
形を整える
Open and shape
the model.

94

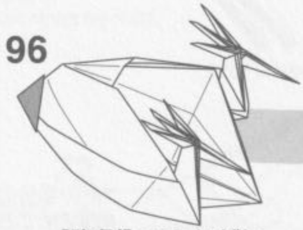


95



かるく内側に折って
クセをつけておく
Fold the flaps softly.

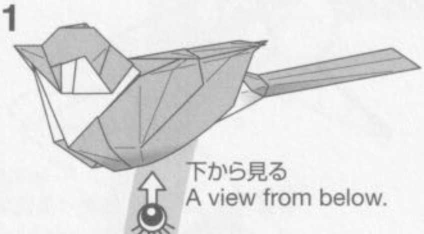
96



[腹側] できあがり
[Ventral side] Completed.

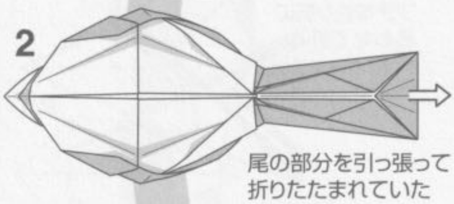
[組み立て方]
[Assembly]

1



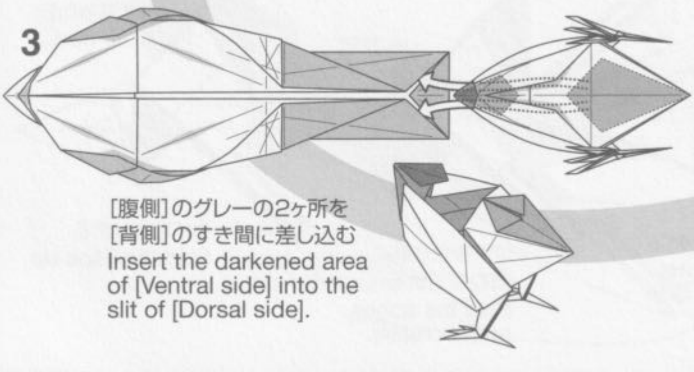
下から見る
A view from below.

2



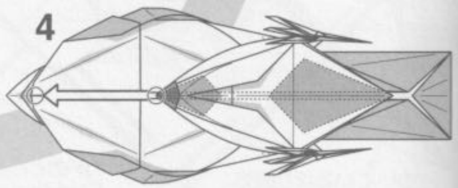
尾の部分を引っ張って
折りたたまれていた
部分をひろげる
Unfold the tail.

3



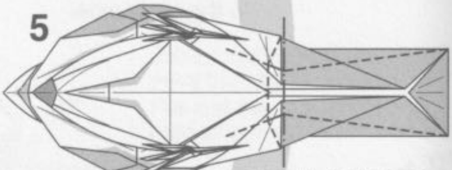
[腹側] のグレーの2ヶ所を
[背側] のすき間に差し込む
Insert the darkened area
of [Ventral side] into the
slit of [Dorsal side].

4



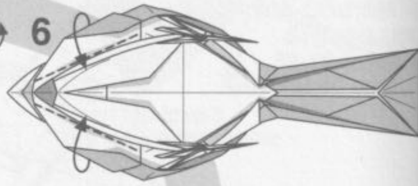
そのまま○のところまで
スライドさせる
Slide it to the circled point.

5



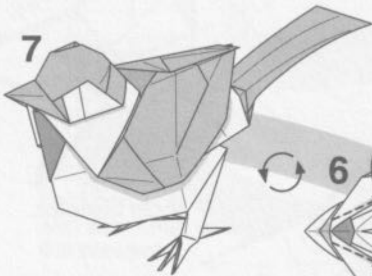
2でひろげた部分を戻す
Re-fold the tail unfolded
in 2.

6



ついている折り筋で
形を整える
Shape the model.

7

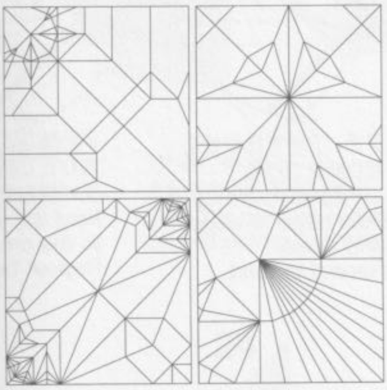


できあがり
Model completed.

組み換え式ニワトリ 2022

Modular Chicken 2022

Created in 2022





推奨用紙 15cm

この作品の主なコンセプトは、パーツの組み換えによって、多様な品種が存在するニワトリを折り分けるというものです。頭部、腹部、脚、尾の4つに分けているのは、このコンセプトを達成するための最低限のパーツ分けとして創作当時に出した結論でした。

『第27回折紙探偵団コンベンション折り図集』に掲載した前作がありますが、その後いくつかのきっかけがあり、別パーツの考案や改良を行ったため、その最新版という位置づけの作品になります。尚、コンセプト通り前作のパーツともある程度互換性があるので、もし両方の折り図を所持していれば組み換えて遊ぶ楽しさも体験していただきたいです。

本書の作例では、複合によって難度が下がったことから、比較的厚めの紙でも折れるという特徴を利用して、メタリックな紙や柄物の和紙なども利用しています。複雑系の作品では、使う紙を選ぶときにどうしても薄くて大きいという条件を最優先にせざるを得ないことが多いですが、紙の選択肢が増えたことで、最近では行っていなかった紙探しの楽しみを再発見させてくれた作品でもあります。是非いろいろな紙で楽しんでください。

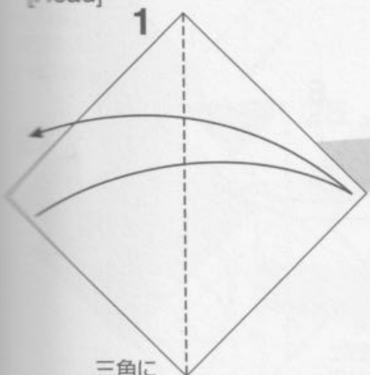
The initial idea when I designed this model was to fold out various kinds of chicken by combining modular parts. The four parts (head, abdomen, legs, and tail) were designed separately as minimally necessary modules for the model to achieve that goal.

The current model is a revised version of the one published in The 27th Origami Tantendan Convention book. The modular parts of the two versions are broadly compatible with each other, so you can enjoy combining them if you have diagrams for both.

The sample model in this book uses a metallic sheet and a patterned washi, which was made possible because the model is a composite one, which is easier than one-uncut-sheet models. When we choose sheets for complex models, we are often forced to choose a large thin sheet as a top priority, but a model like this one allows for rediscovering the pleasure of searching for the best paper to use, which I have not done recently. You can of course enjoy folding this model using various kinds of paper.

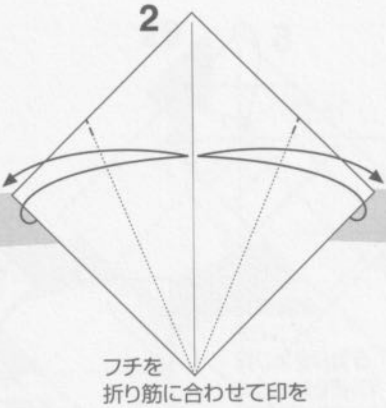
[頭部]
[Head]

1



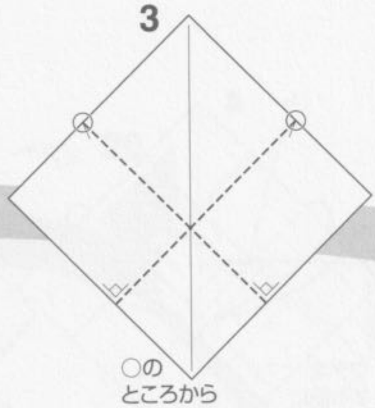
三角に
折り筋をつける
Fold in half and unfold.

2



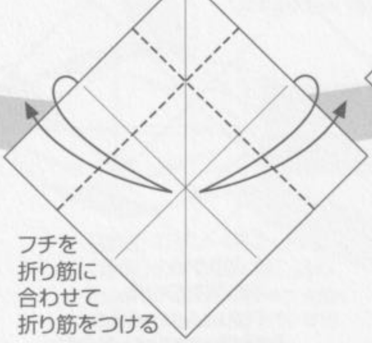
フチを
折り筋に合わせて印を
つける
Fold the edges to the crease but only mark at the edge.

3



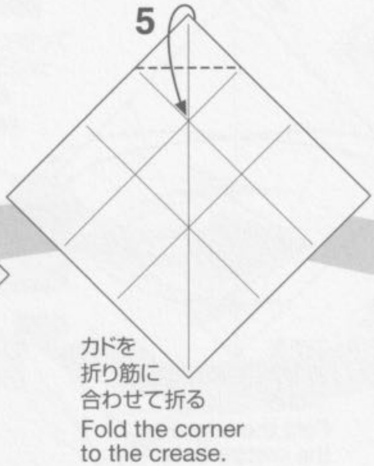
○の
ところから
折り筋をつける
Fold and unfold at the circled points.

4



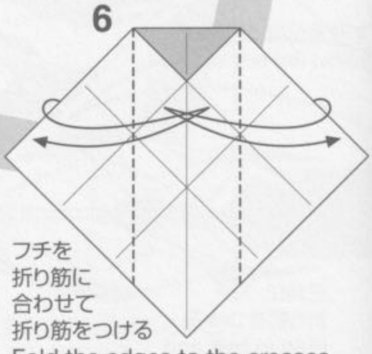
フチを
折り筋に
合わせて
折り筋をつける
Fold the edges to the creases
and unfold.

5



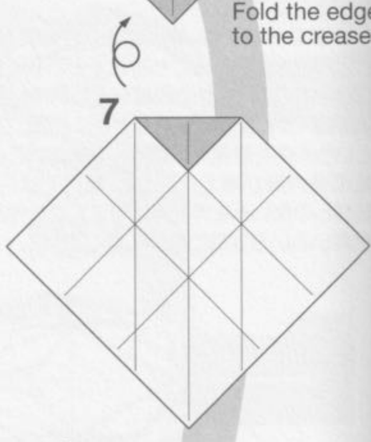
カドを
折り筋に
合わせて折る
Fold the corner
to the crease.

6

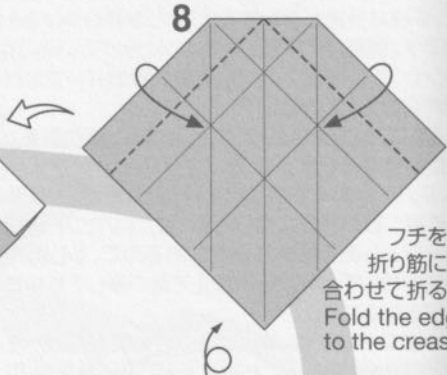


フチを
折り筋に
合わせて
折り筋をつける
Fold the edges to the creases
and unfold.

7

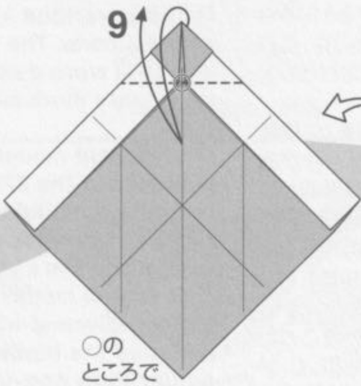


8



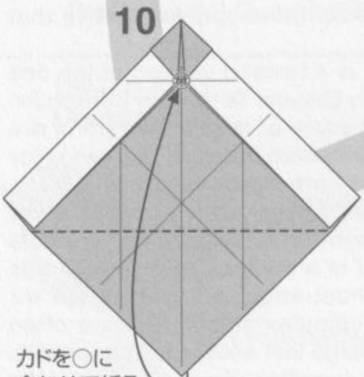
フチを
折り筋に
合わせて折る
Fold the edges
to the creases.

9



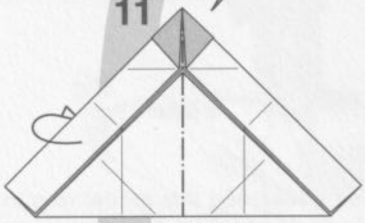
○の
ところで
折り筋をつける
Fold at the circled point
and unfold.

10



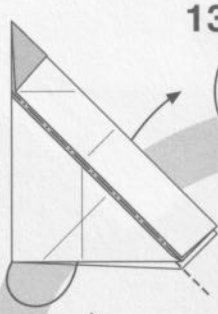
カドを○に
合わせて折る
Fold the corner
to the circled point.

11



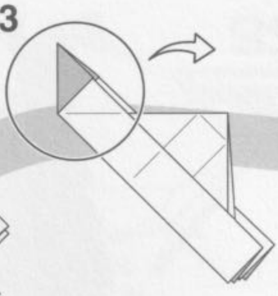
後ろへ半分に折る
Fold in half behind.

12

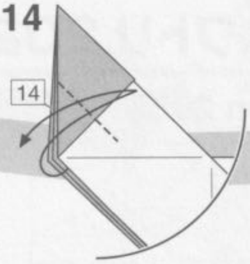


ついている
折り筋で
中わり折り
Inside reverse
fold along
the creases.

13

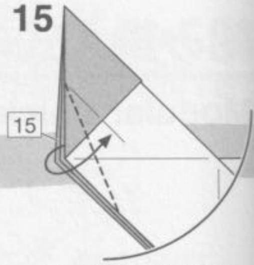


14

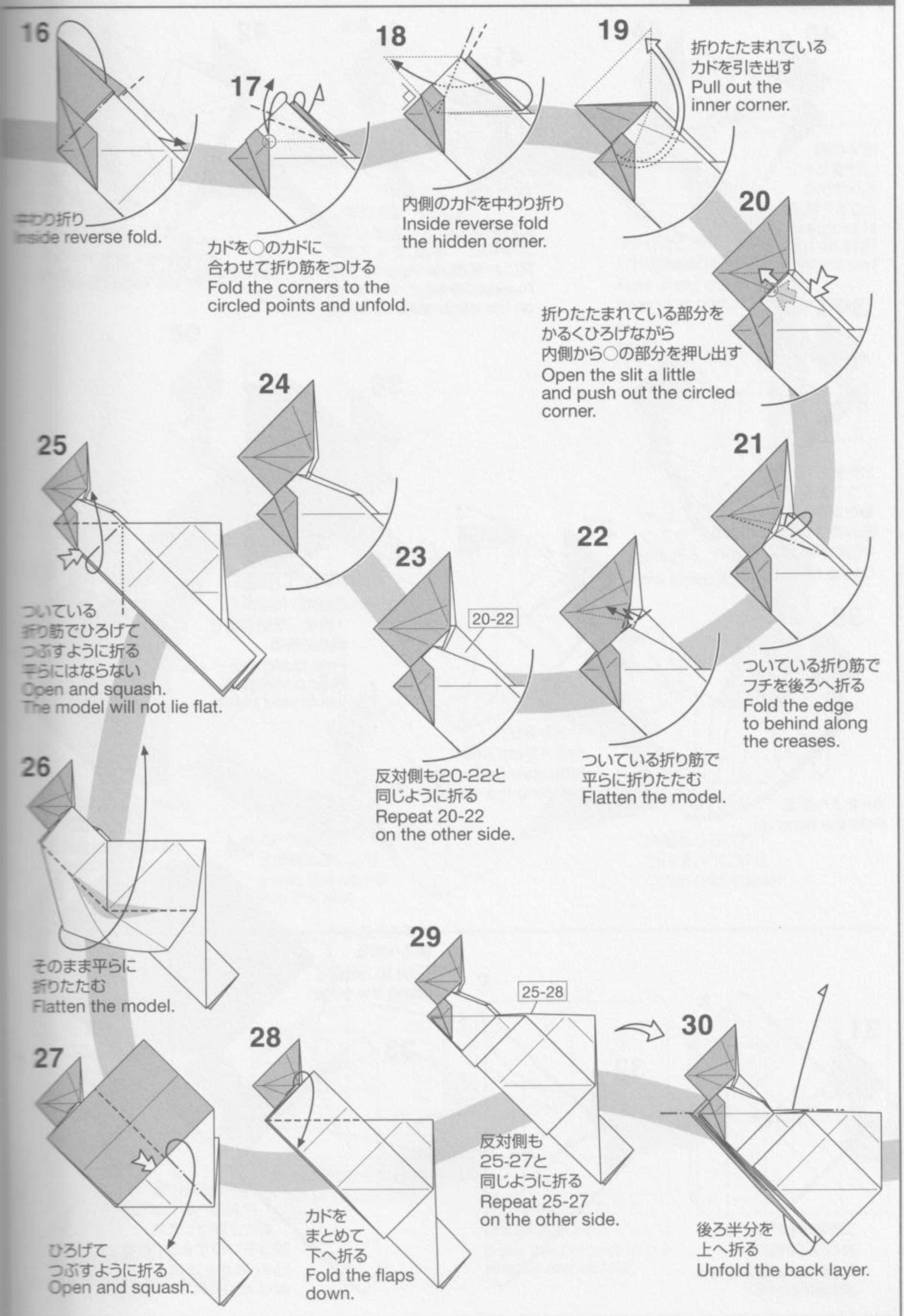


フチとフチを合わせて
折り筋をつける
反対側も同じように折る
Fold edge to edge
and unfold.
Repeat behind.

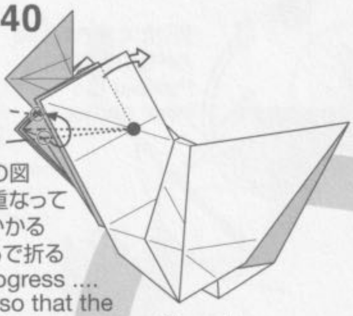
15



フチをつけた折り筋に
合わせて折る
反対側も同じように折る
Fold the edge
to the crease.
Repeat behind.

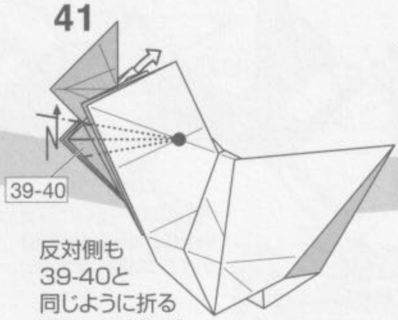

16
中わり折り
Inside reverse fold.
17
カドを○のカドに
合わせて折り筋をつける
Fold the corners to the circled points and unfold.
18
内側のカドを中わり折り
Inside reverse fold the hidden corner.
19
折りたたまれている
カドを引き出す
Pull out the inner corner.
20
折りたたまれている部分を
かるくひろげながら
内側から○の部分を押し出す
Open the slit a little and push out the circled corner.
21
ついている折り筋で
フチを後ろへ折る
Fold the edge to behind along the creases.
22
ついている折り筋で
平らに折りたたむ
Flatten the model.
23
20-22
反対側も20-22と
同じように折る
Repeat 20-22 on the other side.
24
25
ついている
折り筋でひろげて
つぶすように折る
平らにはならない
Open and squash.
The model will not lie flat.
26
そのまま平らに
折りたたむ
Flatten the model.
27
ひろげて
つぶすように折る
Open and squash.
28
カドを
まとめて
下へ折る
Fold the flaps down.
29
25-28
反対側も
25-27と
同じように折る
Repeat 25-27 on the other side.
30
後ろ半分を
上へ折る
Unfold the back layer.

40



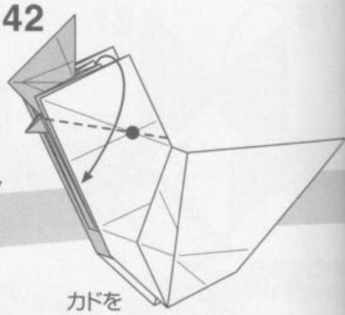
途中の図
○が重なって
引っかかる
ところで折る
In progress ....
Fold so that the
two circled points will meet.

41



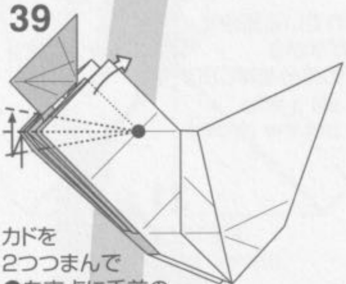
反対側も
39-40と
同じように折る
Repeat 39-40
on the other side.

42



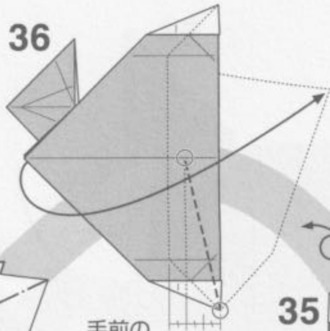
カドを
まとめて下へ折る
Fold the flaps down.

39



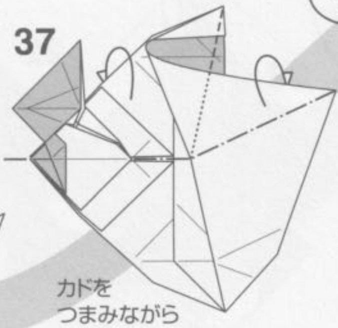
カドを
2つつまんで
●を支点に手前の
部分をずらすように折る
42まで平らにならない
Crimp two layers.

36



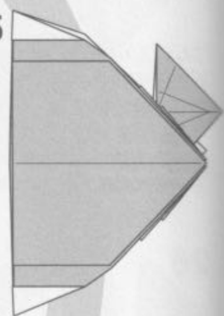
手前の
1枚を○を結ぶ線で
斜めに折る
Fold along the
line connecting
the circled points.

37

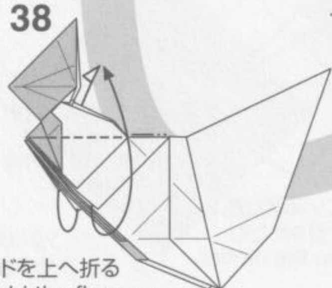


カドを
つまみながら
後ろへ半分に折る
Mountain fold while
pinching the corner.

35

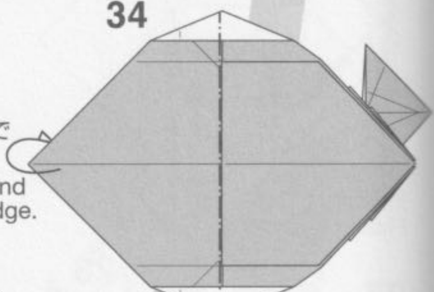


38



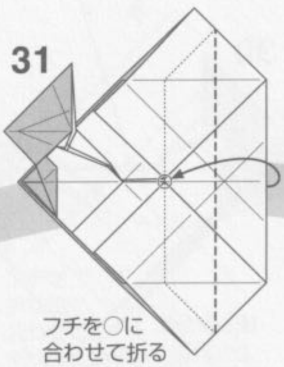
カドを上へ折る
Fold the flaps up.

34



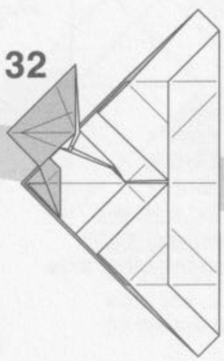
フチのところで
後ろへ折る
Fold to behind
along the edge.

31

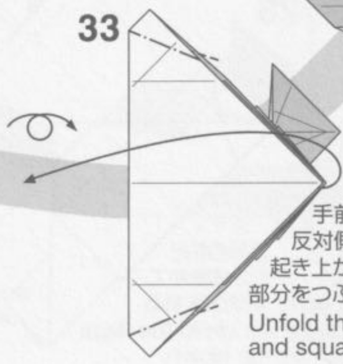


フチを○に
合わせて折る
Fold the edge to the
circled point.

32

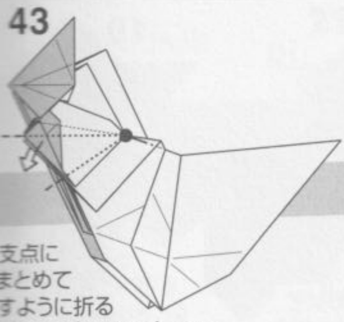


33



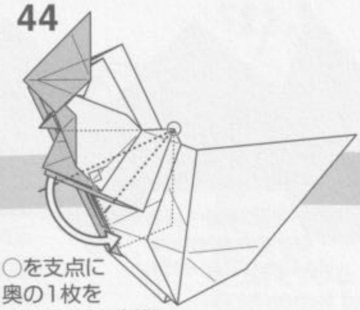
手前のカドを
反対側へひろげて
起き上がってきた
部分をつぶすように折る
Unfold the layer
and squash.

43



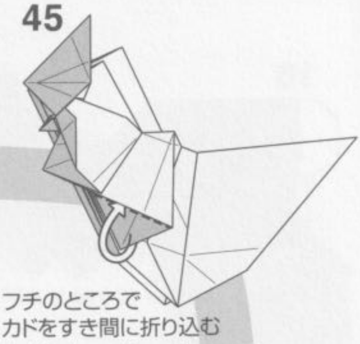
●を支点に
2枚まとめて
ずらすように折る
Pull down the two layers
with the dotted point as a pivot.

44



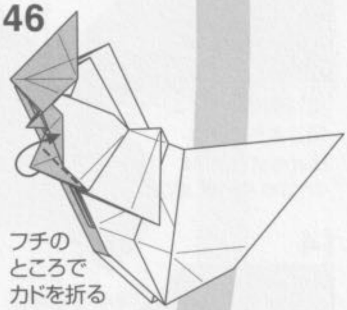
○を支点に
奥の1枚を
ずらすように折る
Pull down the inner
layer with the circled
point as a pivot

45



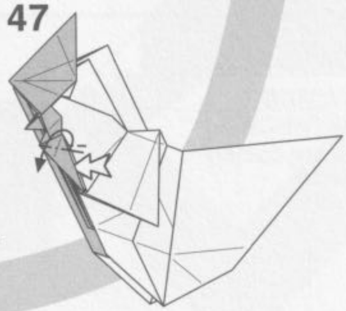
フチのところで
カドをすき間に折り込む
Fold along the edge and
insert the corner into the slit.

46



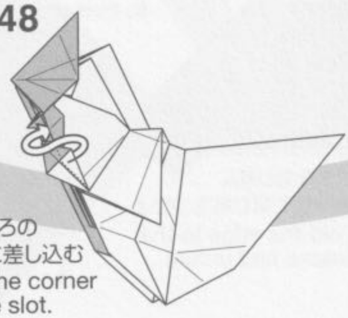
フチの
ところで
カドを折る
Fold along the edge.

47



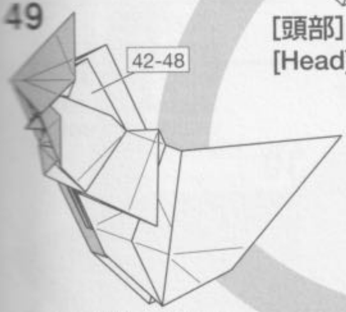
内側をひろげて
つぶすように折る
Open and squash.

48



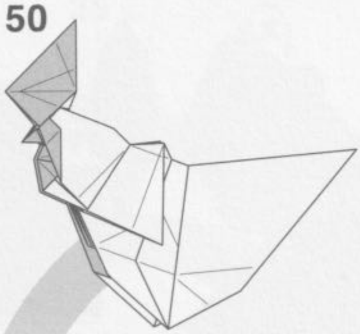
カドを後ろの
すき間に差し込む
Insert the corner
into the slot.

49



反対側も42-48と
同じように折る
Repeat 42-48
on the other side.

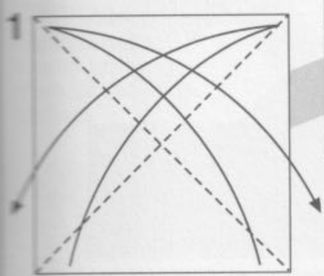
50



[頭部] できあがり
[Head] Completed.

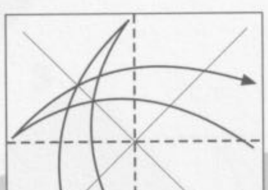
[腹部]
[Chest]

1



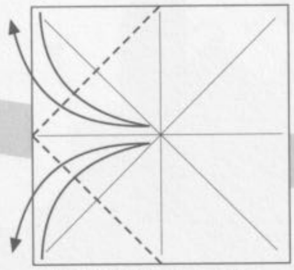
三角に折り筋をつける
Fold in halves and unfold.

2



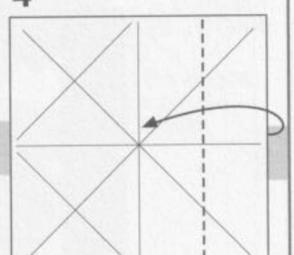
半分に折り筋をつける
Fold in halves and
unfold.

3



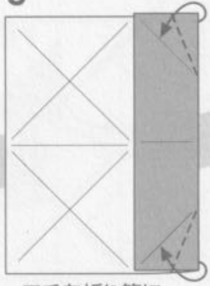
カドを中心に合わせて
折り筋をつける
Fold the corners to the
center and unfold.

4



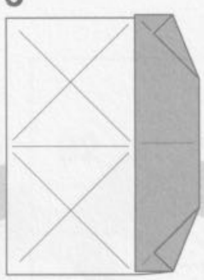
フチを折り筋に
合わせて折る
Fold the edge
to the crease.

5



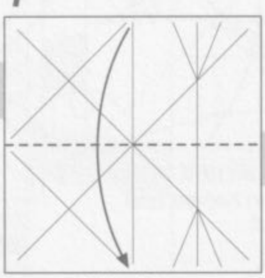
フチを折り筋に
合わせて折る
Fold the edges
to the creases.

6



全部ひろげる
Unfold everything.

7



半分に折る
Fold in half.

8



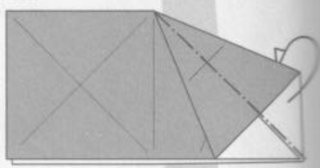
ついている折り筋で折る
Fold along the crease.

9



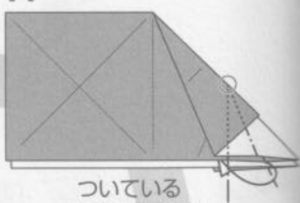
内側をひろげて
つぶすように折る
Open and squash.

10



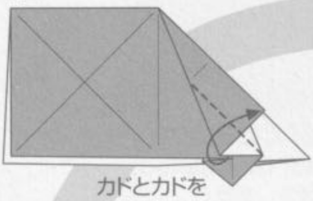
後ろへ折る
Fold behind.

11



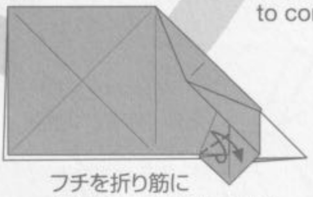
ついている
折り筋を使って
後ろへつぶすように折る
Squash to inside
using the creases.

12



カドとカドを
合わせて折る
Fold corner
to corner.

13



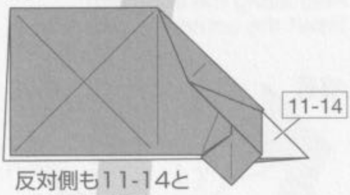
フチを折り筋に
合わせて折り筋をつける
Fold the edge to the
crease and unfold.

14



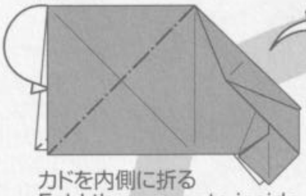
つけた折り筋で
カドを内側に折る
Fold the corner
to inside.

15



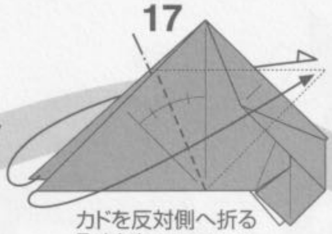
反対側も11-14と
同じように折る
Repeat 11-14
on the other side.

16



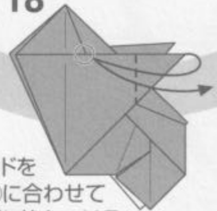
カドを内側に折る
Fold the corner to inside.

17



カドを反対側へ折る
Fold the corners
to the other side.

18



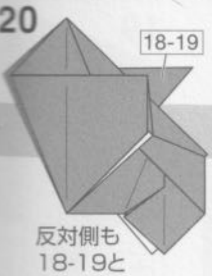
カドを
○に合わせて
折り筋をつける
Fold the corner
to the circled point
and unfold.

19



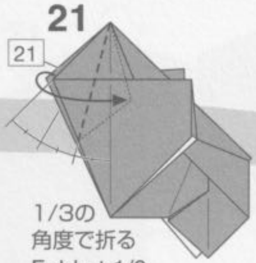
つけた
折り筋で
カドを内側に
折り込む
Fold the corner
to inside along
the creases.

20



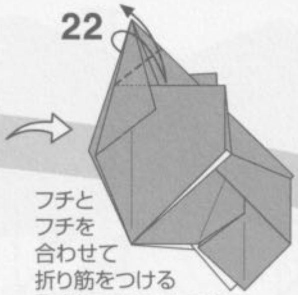
反対側も
18-19と
同じように折る
Repeat 18-19
on the other side.

21



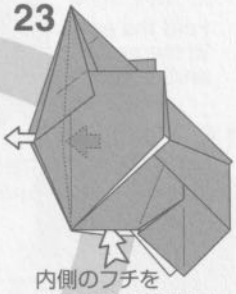
1/3の
角度で折る
Fold at 1/3
of the angle.

22



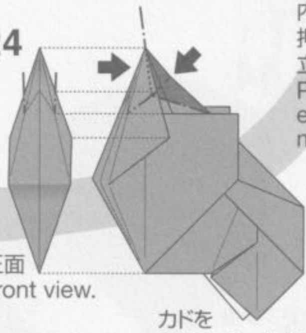
フチと
フチを
合わせて
折り筋をつける
Fold corner to edge
and unfold.

23



内側のフチを
押し出すようにして
立体的にする
Push the inner
edge out and the
model will be 3-D.

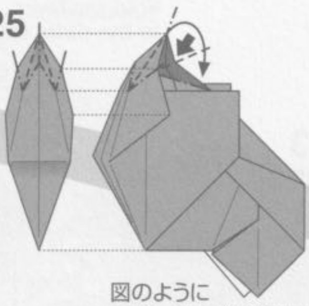
24



正面
Front view.

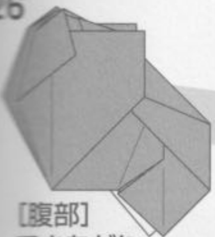
カドを
前後からつまむ
Pinch the corner.

25



図のように
つまんだカドを折りたたむ
Crimp and assemble
the corner as shown.

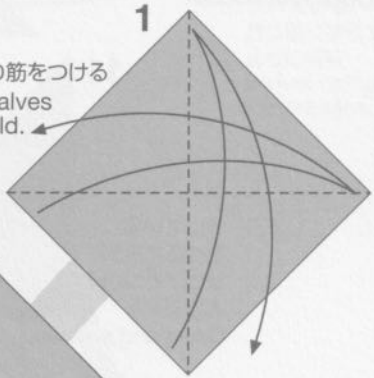
26



[腹部]
できあがり
[Chest] Completed.

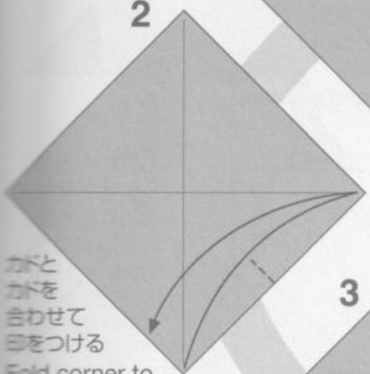
[尾]
[Tail]

1



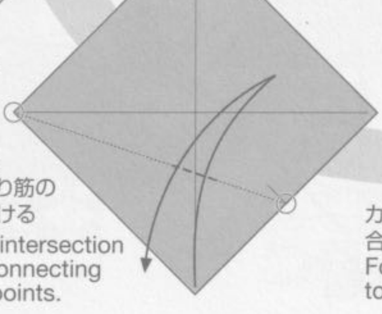
三角に折り筋をつける
Fold in halves
and unfold.

2



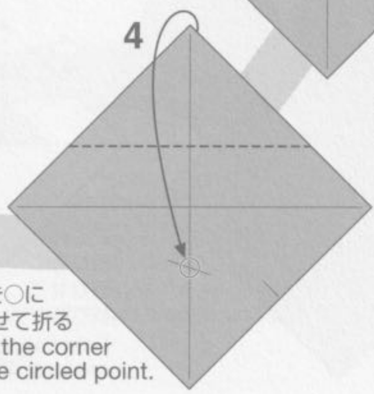
カドと
カドを
合わせて
印をつける
Fold corner to
corner but only
mark at the edge.
Unfold.

3



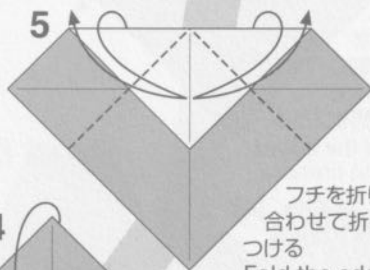
○を結ぶ線と
ついている折り筋の
交点に印をつける
Mark at the intersection
of the line connecting
the circled points.

4



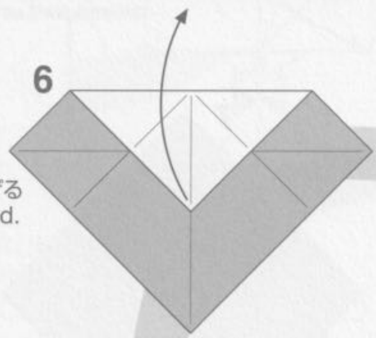
カドを○に
合わせて折る
Fold the corner
to the circled point.

5

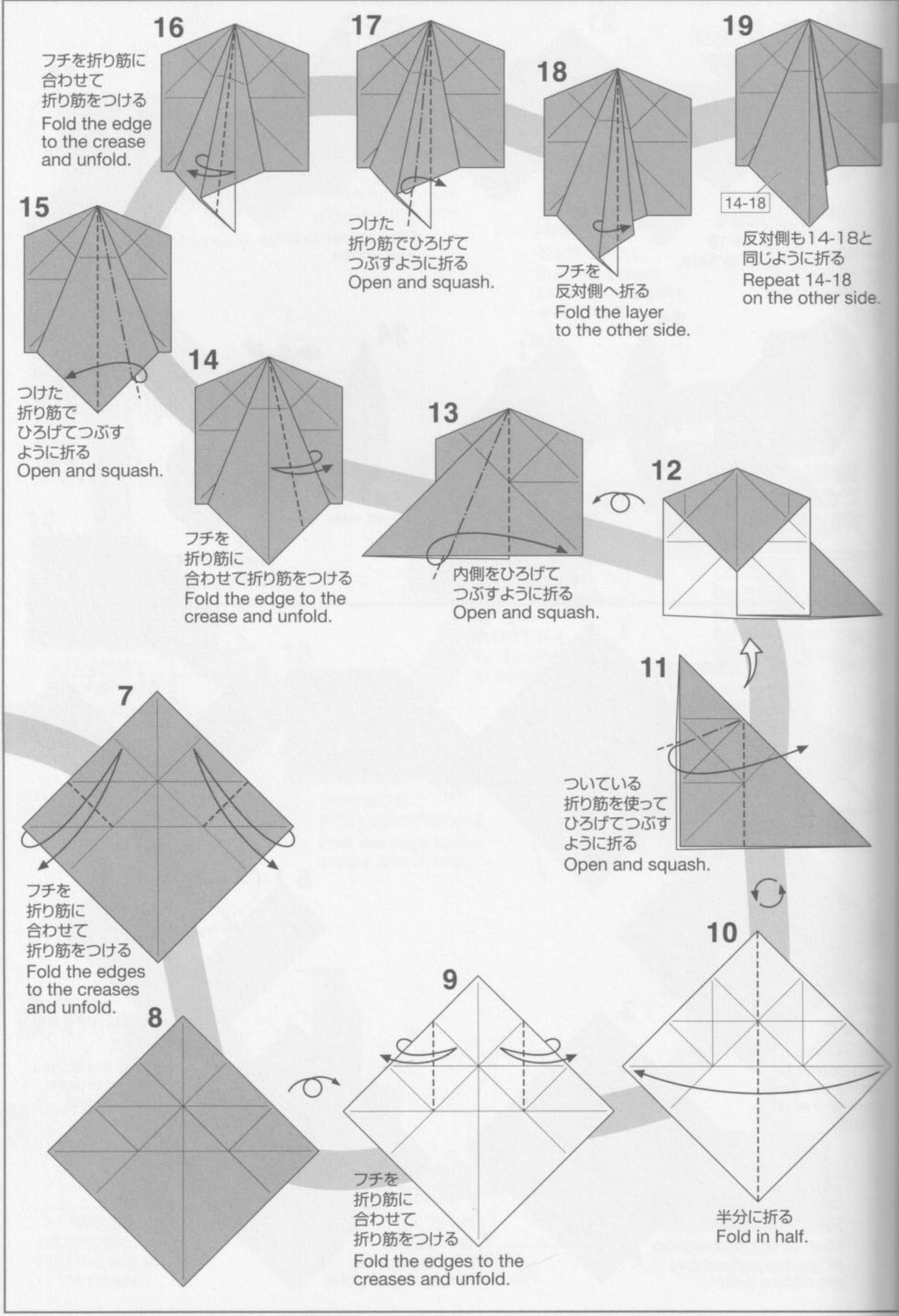


フチを折り筋に
合わせて折り筋を
つける
Fold the edges
to the crease
and unfold.

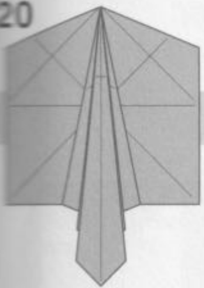
6



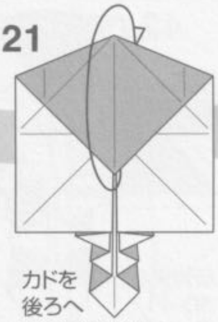
カドを
ひろげる
Unfold.


7
フチを
折り筋に
合わせて
折り筋をつける
Fold the edges
to the creases
and unfold.
8
9
フチを
折り筋に
合わせて
折り筋をつける
Fold the edges to the
creases and unfold.
10
半分に折る
Fold in half.
11
ついている
折り筋を使って
ひろげてつぶす
ように折る
Open and squash.
12
13
内側をひろげて
つぶすように折る
Open and squash.
14
フチを
折り筋に
合わせて折り筋をつける
Fold the edge to the
crease and unfold.
15
つけた
折り筋で
ひろげてつぶす
ように折る
Open and squash.
16
フチを折り筋に
合わせて
折り筋をつける
Fold the edge
to the crease
and unfold.
17
つけた
折り筋でひろげて
つぶすように折る
Open and squash.
18
フチを
反対側へ折る
Fold the layer
to the other side.
19
14-18
反対側も14-18と
同じように折る
Repeat 14-18
on the other side.

20

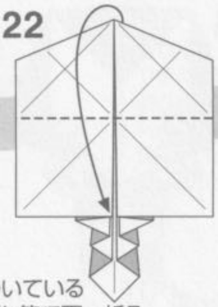


21



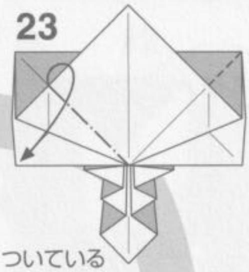
カドを
後ろへ
かぶせるように
ひっくり返す
Wrap the corner
inside out.

22



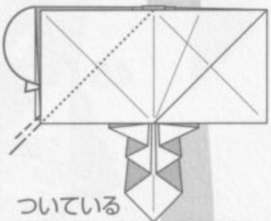
ついている
折り筋で下へ折る
Fold down along
the crease.

23



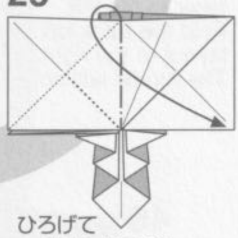
ついている
折り筋でずらすように折る
Swivel using the creases.

24



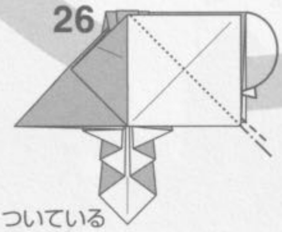
ついている
折り筋でカドを内側に折る
Fold the corner inside.

25



ひろげて
つぶすように折る
Open and squash.

26



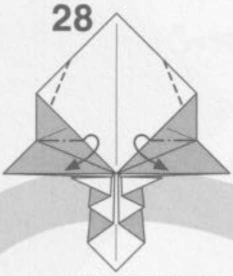
ついている
折り筋でカドを内側に折る
Fold the corner inside.

27



ついている
折り筋でずらす
ように折る
Swivel using
the creases.

28



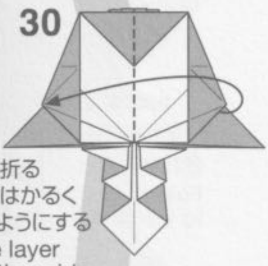
すき間をひろげて
ずらすように折る
Swivel.

29



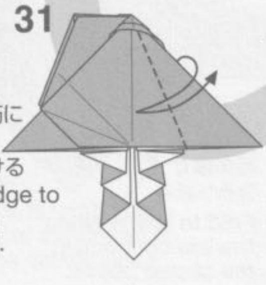
カドの
ところで
下へ折る
Fold down
at the corner.

30



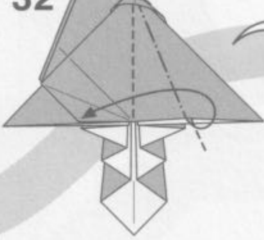
カドを
反対側へ折る
上の部分はかるく
ひろげるようにする
Fold the layer
to the other side.
The top part
will not lie flat.

31



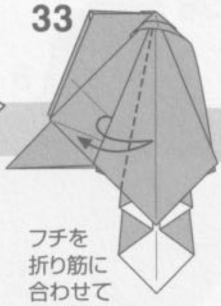
フチを折り筋に
合わせて
折り筋をつける
Fold the edge to
the crease
and unfold.

32



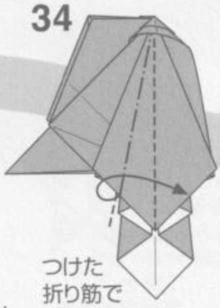
つけた折り筋で
ひろげてつぶす
ように折る
Open and squash.

33



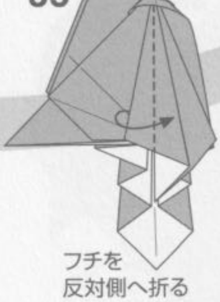
フチを
折り筋に
合わせて
折り筋をつける
Fold the edge to
the crease and unfold.

34



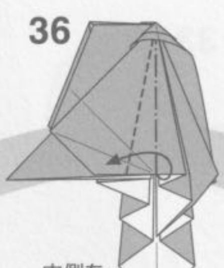
つけた
折り筋で
ひろげてつぶす
ように折る
Open and squash.

35



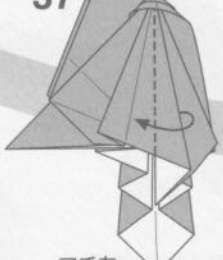
フチを
反対側へ折る
Fold the layer
to the other side.

36



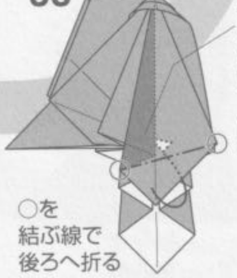
内側を
ひろげて
つぶすように折る
Open and squash.

37



フチを
反対側へ折る
Fold the layer
to the other side.

38



折ったカドを
この部分の
後ろへ折る
The corners
will be behind
this layer.

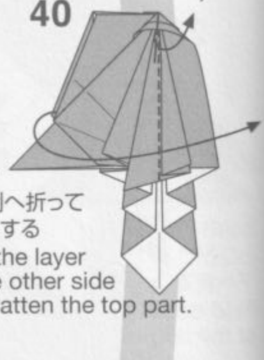
○を
結ぶ線で
後ろへ折る
Fold to inside along
the line connecting
the circled points.

39



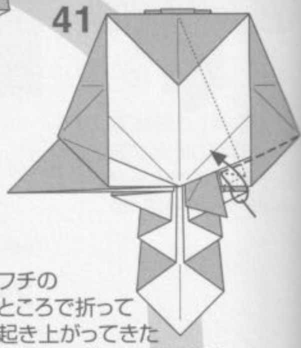
フチを折り筋に
合わせて折る
Fold the edge
to the crease.

40



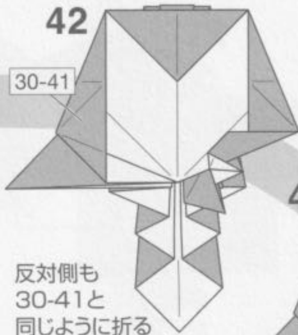
カドを
反対側へ折って
平らにする
Fold the layer
to the other side
and flatten the top part.

41



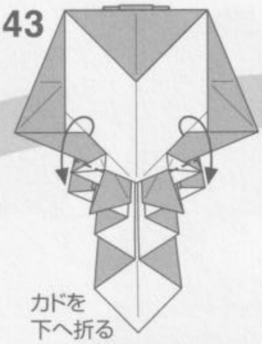
フチの
ところで折って
起き上がってきた
部分をつぶすように折る
Fold along the edge
and squash.

42



反対側も
30-41と
同じように折る
Repeat 30-41
on the other side.

43



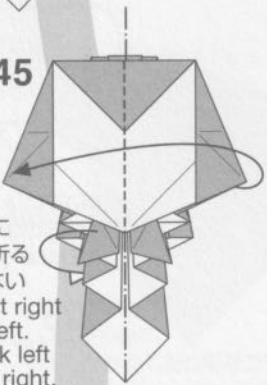
カドを
下へ折る
Fold the flaps down.

44



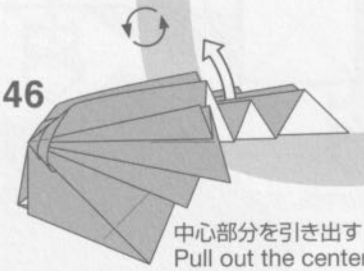
カドを
すき間に
折り込む
Fold the
corners
to inside.

45



右側手前を左に
左側奥を右に折る
平らにはならない
Fold the front right
layer to the left.
Fold the back left
layers to the right.
The model will not lie flat.

46



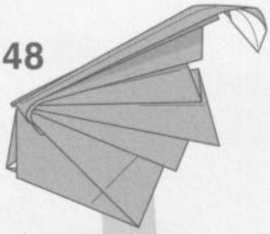
中心部分を引き出す
Pull out the center
part.

47

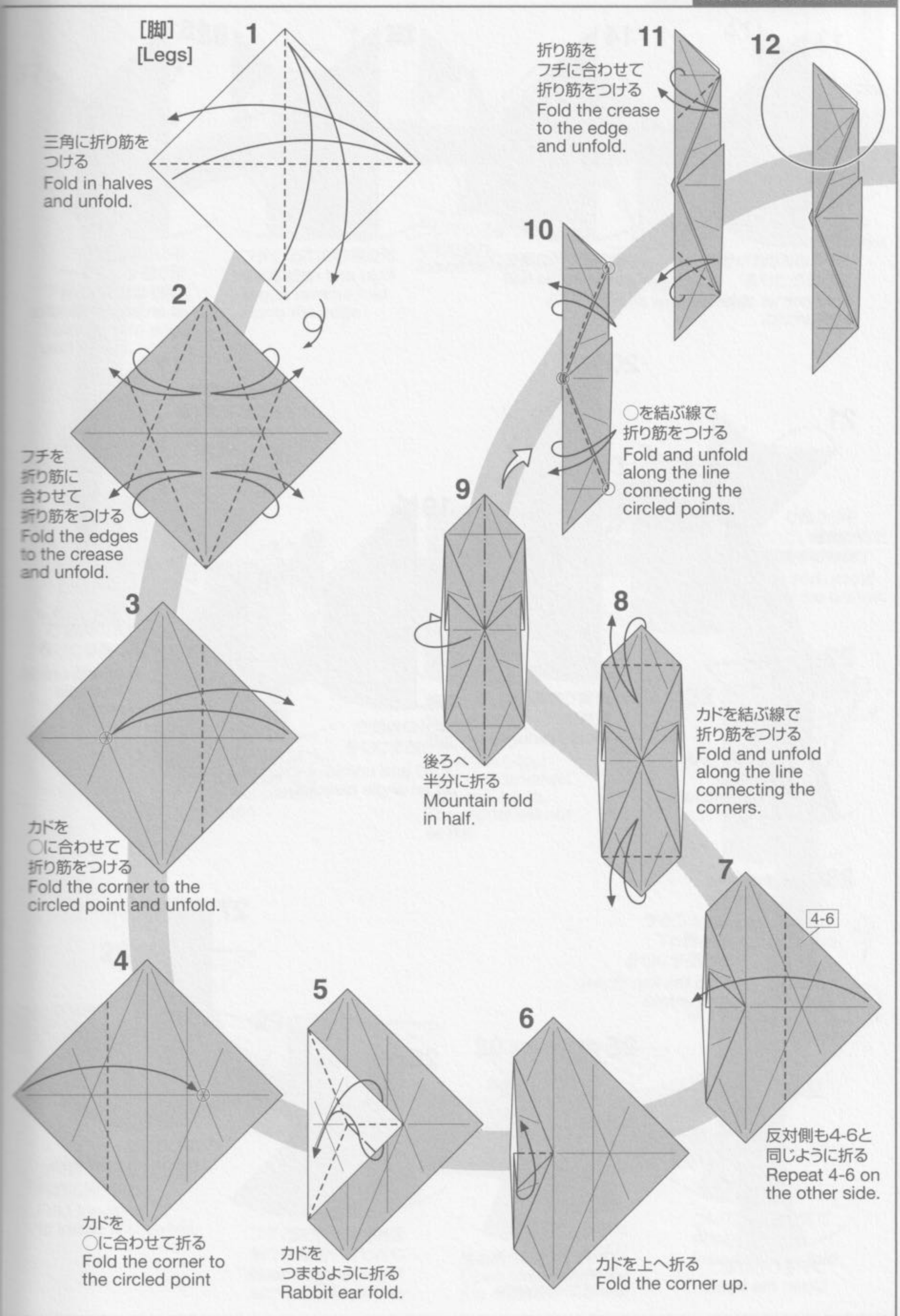


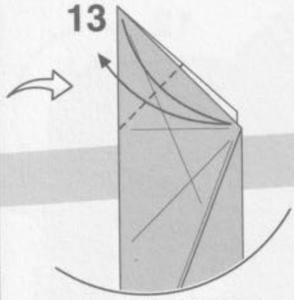
カドを曲げる
bend the flap.

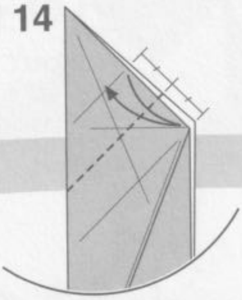
48

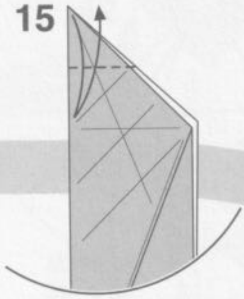


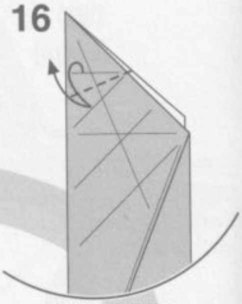
[尾]できあがり
[Tail] Completed.

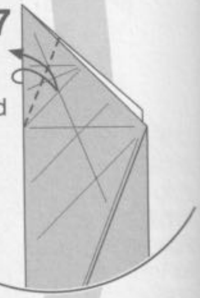

[脚]
[Legs]
1
三角に折り筋を
つける
Fold in halves
and unfold.
2
フチを
折り筋に
合わせて
折り筋をつける
Fold the edges
to the crease
and unfold.
3
カドを
○に合わせて
折り筋をつける
Fold the corner to the
circled point and unfold.
4
カドを
○に合わせて折る
Fold the corner to
the circled point
5
カドを
つまむように折る
Rabbit ear fold.
6
カドを上へ折る
Fold the corner up.
7
4-6
反対側も4-6と
同じように折る
Repeat 4-6 on
the other side.
8
カドを結ぶ線で
折り筋をつける
Fold and unfold
along the line
connecting the
corners.
9
後ろへ
半分に折る
Mountain fold
in half.
10
○を結ぶ線で
折り筋をつける
Fold and unfold
along the line
connecting the
circled points.
11
折り筋を
フチに合わせて
折り筋をつける
Fold the crease
to the edge
and unfold.
12

13

カドとカドを合わせて
折り筋をつける
Fold corner to corner
and unfold.

14

半分の幅で折り筋をつける
Crease at the half
of the width.

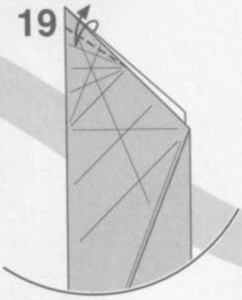
15

折り筋をつける
Fold and unfold.

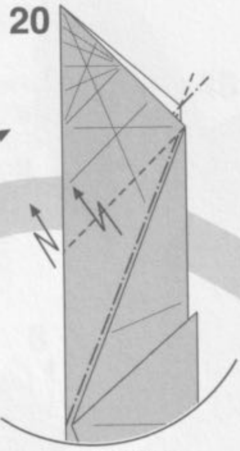
16

半分の角度で
折り筋をつける
Fold and unfold
at an angle bisector.

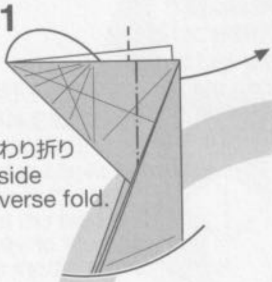
17

半分の角度で
折り筋をつける
Fold and unfold
at an angle
bisector.

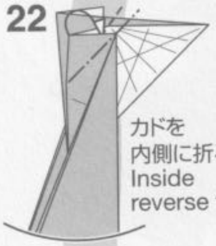
18

半分の角度で
折り筋をつける
Fold and unfold
at an angle
bisector.

19

半分の角度で
折り筋をつける
Fold and unfold
at an angle bisector.

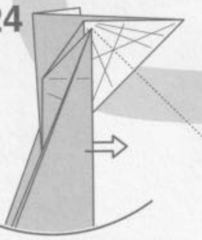
20

両側で内側に
段折り
Pleat inside.

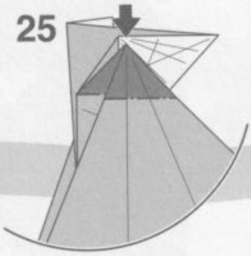
21

中わり折り
Inside
reverse fold.

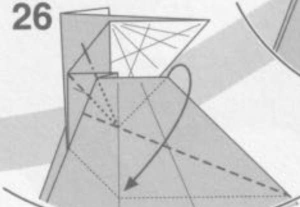
22

カドを
内側に折る
Inside
reverse fold.

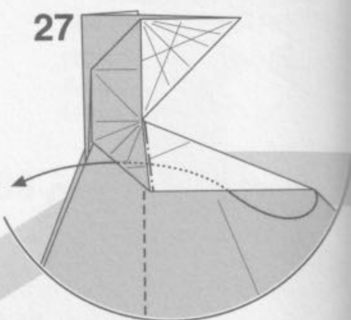
23

開くところで
下へ折って
折り筋をつける
Fold the flap down
and unfold.

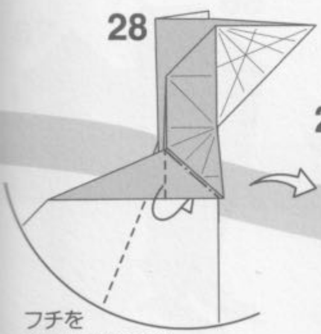
24

フチをひろげる
Open the layer.

25

沈めるように折る
（Open sink）
Open sink
along the crease.

26

カドを下へ折って
ひろげてつぶす
Fold the layer down
and squash.

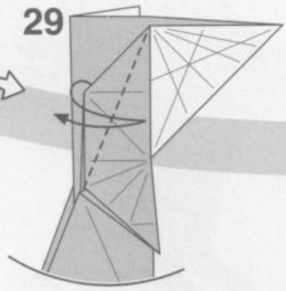
27

中わり折り
Inside reverse fold.

28



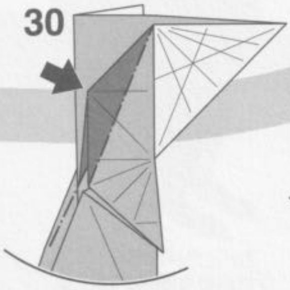
フチを
内側に折り込む
Fold the layer
to inside and swivel.

29



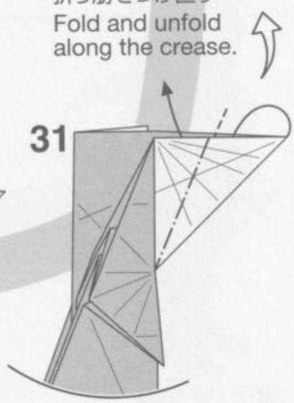
フチとフチを合わせて
折り筋をつける
Fold edge to edge
and unfold.

30



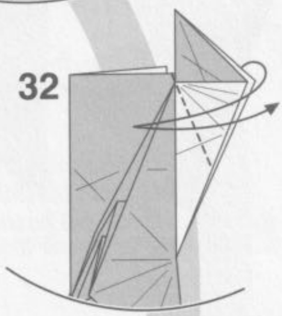
沈め折り(Open sink)
Open sink along
the creases.

31



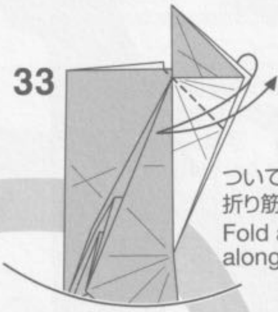
ついている折り筋で
中わり折り
Inside reverse fold.

32



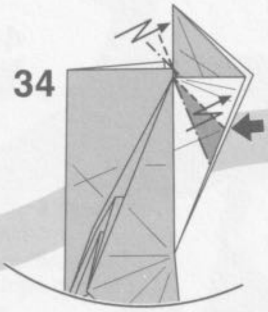
ついている折り筋で
折り筋をつけ直す
Fold and unfold
along the crease.

33



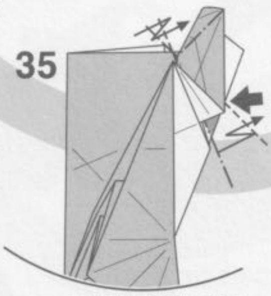
ついている折り筋で
折り筋をつけ直す
Fold and unfold
along the crease.

34



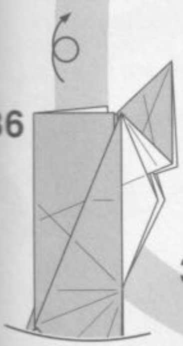
■の部分を
押し込むように
両側で段折り
平らにはならない
Sink the darkened
part and crimp.
The model will not
lie flat.

35

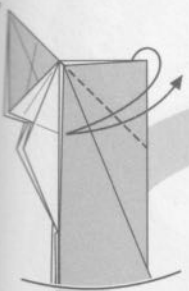


反対側も同じように
折って平らにする
Repeat behind.
Flatten.

36

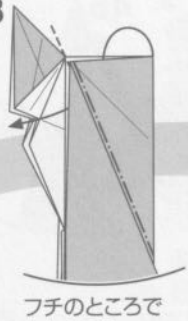


37



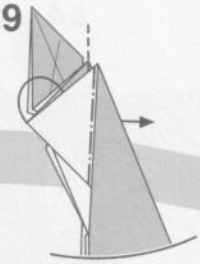
フチとフチを合わせて
折り筋をつける
Fold edge to edge
and unfold.

38



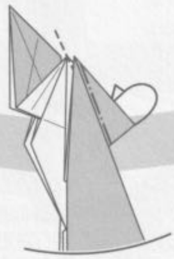
フチのところで
中わり折り
Inside reverse fold
along the edge.

39



ついている折り筋で
中わり折り
Inside reverse fold.

40



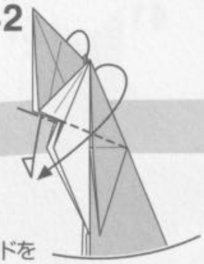
フチのところで
カドを内側に折る
Inside reverse fold.

41



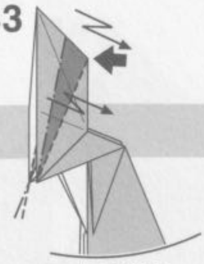
カドを下へ折る
Fold the corner
down.

42



カドを
反対側へ折る
Fold the flaps down.

43



■の部分を
押し込むように
両側で段折り
Pleat outside.

44

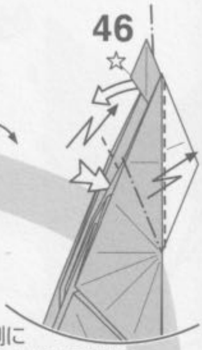


カドを反対側へ折る
Fold the flaps up.

45



46



内側に
ずらすように段折り
Crimp the corners
inside.

47



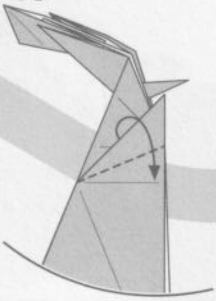
内側のカドを
斜めに折る
Fold the hidden
corner.

48



カドを上へ折る
Fold the flap up.

49



フチを折り筋に
合わせて折る
Fold the edge
to the crease.

50

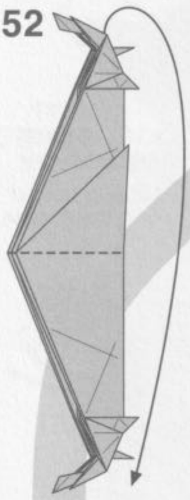


51



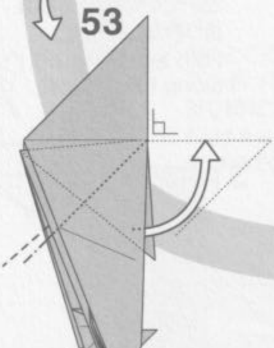
反対側も
13-49と
同じように折る
Repeat 13-49
on the other side.

52



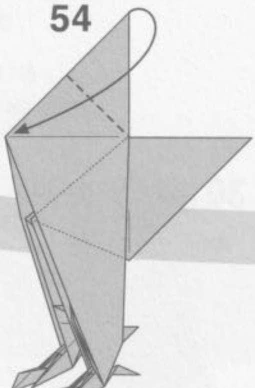
半分に折る
Fold in half.

53



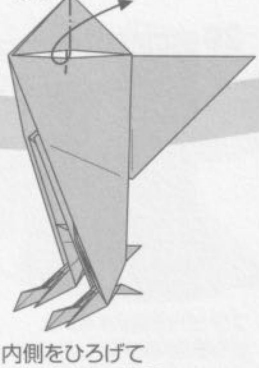
カドをつまんで
引き出すように折る
Pull out the corner.

54



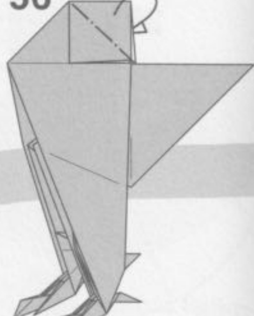
カドとカドを
合わせて折る
Fold corner
to corner.

55



内側をひろげて
つぶすように折る
Open and squash.

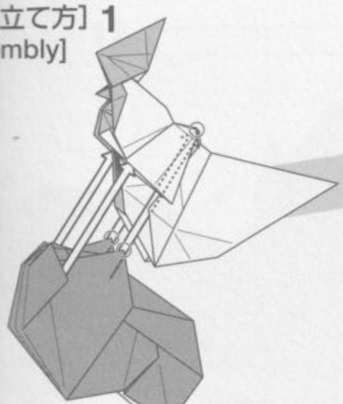
56



カドを後ろへ折る
Fold the corner
to behind.

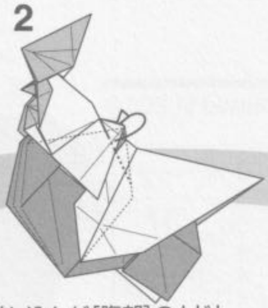
[組み立て方]
[Assembly]

1



○を合わせて
[腹部]のカドをそれぞれ
[頭部]のすき間に差し込む
Insert the corners of [Chest] into the slit of [Head] while aligning the circled points.

2

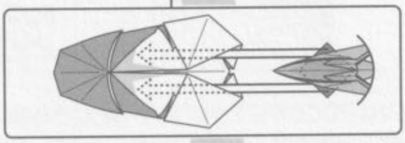


差し込んだ[腹部]のカドと
[頭部]のカドをまとめて
後ろへ折ってとめる
反対側も同じ
Mountain fold the inner corners together and lock.
Repeat behind.

3

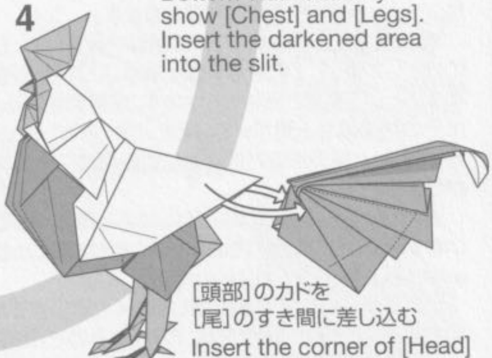
[脚]の■■の部分を
[腹部]のすき間に
差し込む
Insert the darkened area of [Legs] into the slit of [Chest].





[腹部]と[脚]を下から見た図
それぞれ■■の部分を
すき間に差し込む
Bottom view but only show [Chest] and [Legs].
Insert the darkened area into the slit.

4



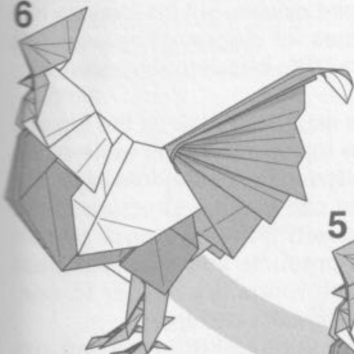
[頭部]のカドを
[尾]のすき間に差し込む
Insert the corner of [Head] into the slit of [Tail].

5



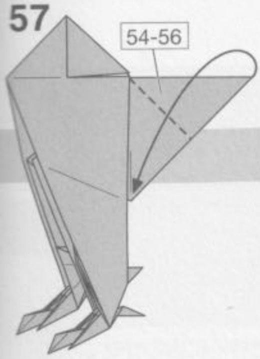
差し込んだ[頭部]のカドと
[尾]のカドをまとめて
中わり折り
Inside reverse fold the hidden corner to lock.

6



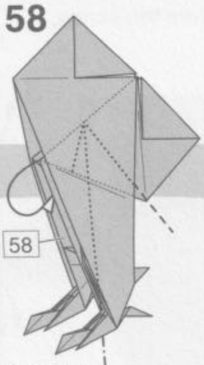
できあがり
Model completed.

57



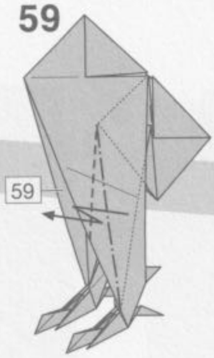
もう一つのカドも
54-56と同じように折る
Repeat 54-56 on the other corner.

58



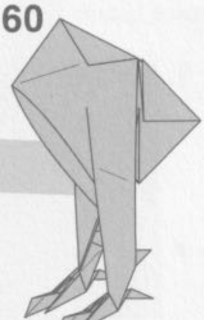
内側のフチを
引き寄せるように折る
反対側も同じように折る
Fold the layer inside.
Repeat on the other side.

59



斜めに段折り
反対側も同じように折る
Pleat.
Repeat on the other side.

60

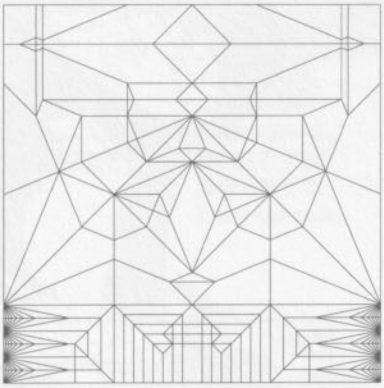


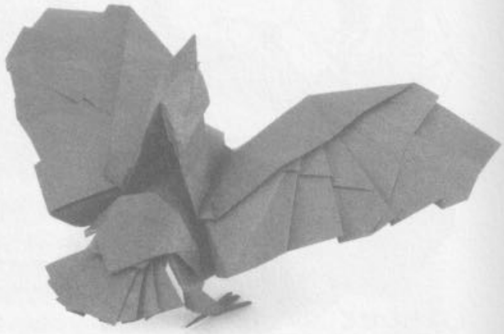
[脚]できあがり
[Legs] Completed.

小鳥

Little Bird

Created in 2010





推奨用紙 35cm

元々は2008年にミクロラプトルという鳥類に近いとされる小型の羽毛恐竜の一種を作ったのですが、その構造を流用して試行錯誤からできた鳥の作品が複数あり、更に折り図化のためにそれらを整理したため、幾度もデザインが変化したというちょっと変わった経緯の作品です。作品名を単に「小鳥」としているのも、同じ理由になります。

構造的には上下の辺に帯状の領域を用意して、上の帯は翼の幅として使い、下の帯は蛇腹に折り込んで趾と尾羽根を表現するという発想からなっています。展開図を見ると、翼の方はその間の領域と繋がっているためわかりにくいかもしれませんが、趾と尾羽根の方は明確に蛇腹構造に分かれているのがわかると思います。

迷わずに折り進められれば楽しめる手順になっていると思いますので、そのためにも23までの折り筋はしっかりと正確につけるようにしてください。

複雑系折り紙の愛好家は察しがつくと思いますが、例に漏れず趾は中わり折りの繰り返しで厚くなるので、比較的薄くてしっかりとした用紙を使うことをおすすめします。

尚、本作の当初のコンセプトの1つとして「翼をそれらしくたたむ」というのがあり、前述した試行錯誤の段階では採用している場合もありました。他にも内部から引き出した紙で立体的な腹部を作った試作もありましたので、余裕がある方はそういったアレンジも楽しんでみてください。

I designed a microraptor, a kind of small feathered dinosaur akin to birds in 2008. Derived from it I designed several bird models, but the designs had changed many times for diagramming, which is why the model is a "little bird," not any particular kind of bird.

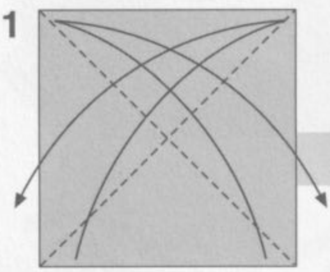
The model has an expanded area on the top and bottom edges. The top one is for the width of the wings, and the bottom one is pleat-folded for the claws and tail. You can see the structure of the legs and the tail clearly from the crease pattern because they are products and clear-cut pleat folds. However, the wings are harder to see, because they are joint with other areas.

The folding steps are straightforward, but you should crease tightly and precisely in Step 23.

Complex-model lovers may easily guess that the feet with repeated inside reverse folds will be very thick, so use thin but strong paper.

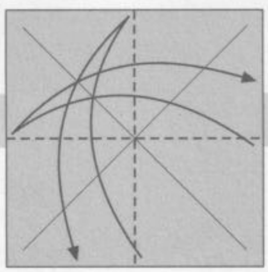
Originally, the idea was that wings should be folded as birds would do. I made a prototype model adopting this idea, and you may be able to enjoy arranging and refolding in that way, or you may fold out the abdomen by pulling out layers from the inside.

1



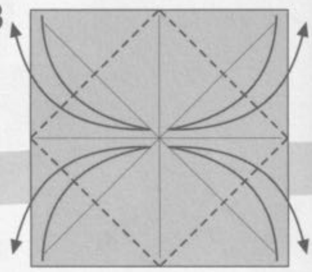
三角に折り筋をつける
Fold in halves and unfold.

2



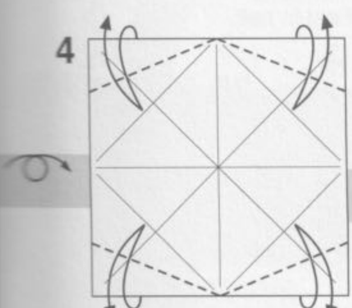
半分に折り筋をつける
Fold in halves and unfold.

3



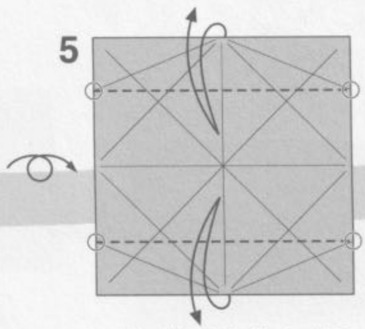
カドを中心に合わせて折り筋をつける
Fold the corners to the center and unfold.

4



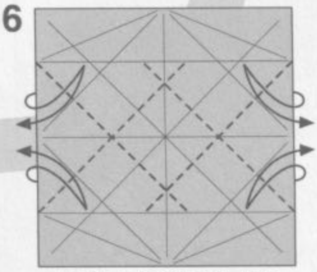
フチを折り筋に合わせて
折り筋をつける
Fold the edges to the creases and unfold.

5



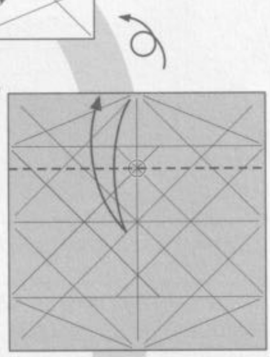
○を結ぶ線で折り筋をつける
Crease along the line connecting the circled points.

6



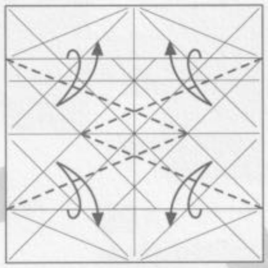
フチを折り筋に合わせて
折り筋をつける
Fold the edges to the creases and unfold.

7



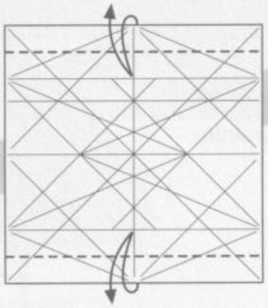
○を通る線で折り筋をつける
Crease at the circled point.

8



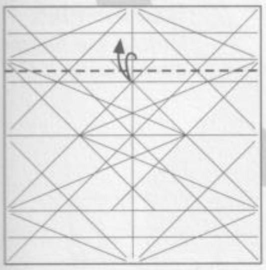
折り筋と
折り筋を合わせて
折り筋をつける
Fold the creases onto each other and unfold.

9



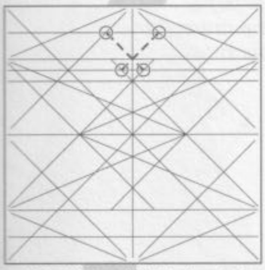
フチを折り筋に合わせて
折り筋をつける
Fold the edges to the creases and unfold.

10



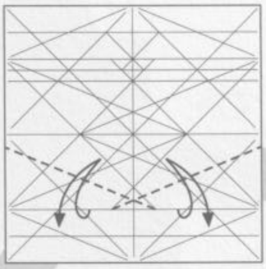
折り筋と折り筋を合わせて
折り筋をつける
Fold so that the two neighboring crease lines will meet and unfold.

11



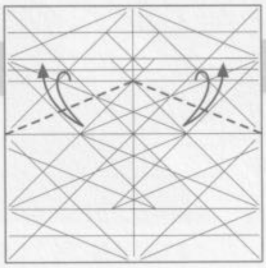
○を結ぶ線で折り筋をつける
Crease along the line connecting the circled points.

12



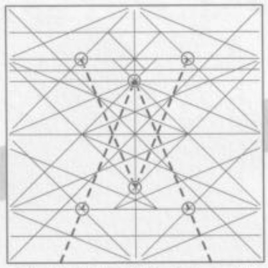
折り筋と
折り筋を合わせて
折り筋をつける
Fold the crease lines onto each other and unfold.

13



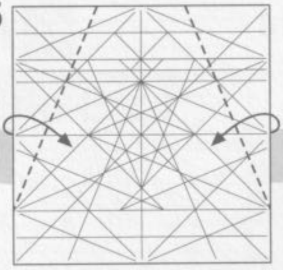
折り筋と折り筋を合わせて
折り筋をつける
Fold the crease lines onto each other and unfold.

14



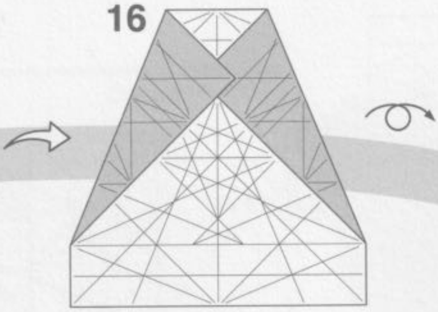
○を結ぶ線で折り筋をつける
Crease along the line connecting the circled points.

15

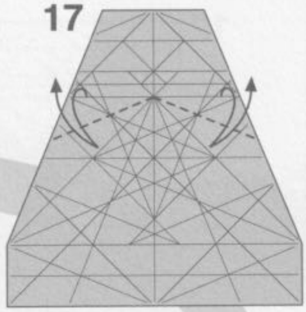


フチを折り筋に合わせて折る
Fold the edges to the creases.

16

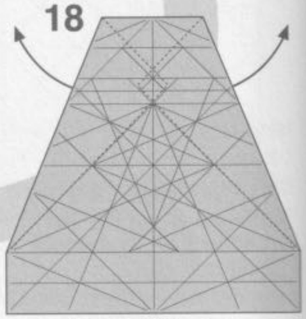


17



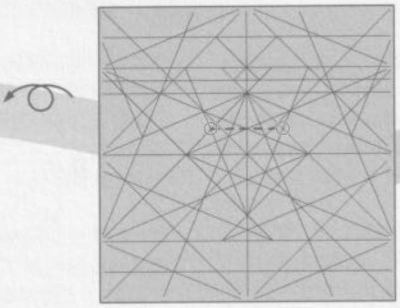
折り筋と折り筋を合わせて
折り筋をつける
Fold the crease lines onto each other and unfold.

18



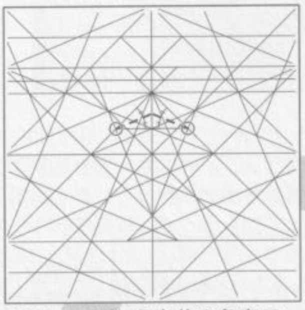
後ろのカドを戻す
Unfold the hidden corners.

19



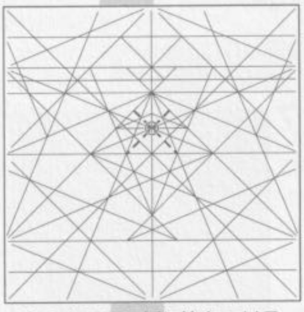
○を結ぶ線で折り筋をつける
Crease along the line connecting the circled points.

20



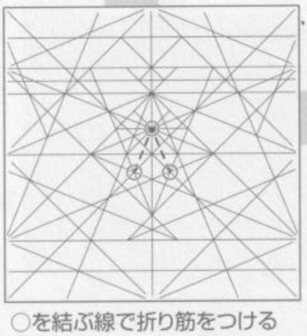
○のところから半分の角度で
折り筋をつける
Fold and unfold at angle bisectors.

21



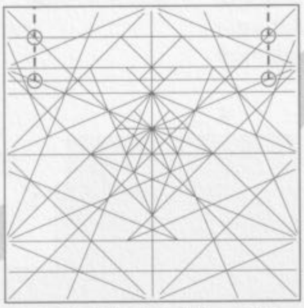
○のところで折り筋をつける
Fold at the circled point and unfold.

22



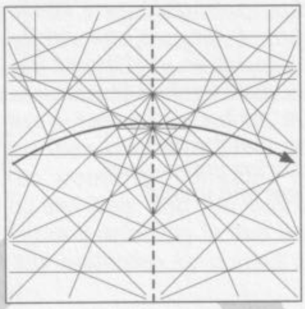
○を結ぶ線で折り筋をつける
Crease along the line connecting the circled points.

23



○を結ぶ線で折り筋をつける
Crease along the line connecting the circled points.

24

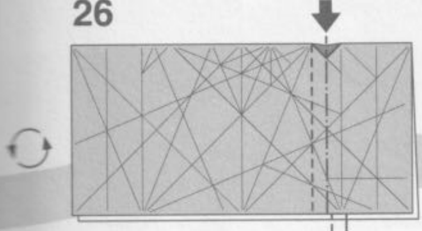


半分に折る
Fold in half.

25

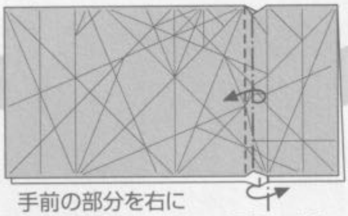


26



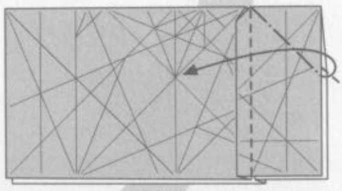
中央をつぶしながら
両側にヒダを作るように折る
Push down the darkened area and pleat on both sides.

27



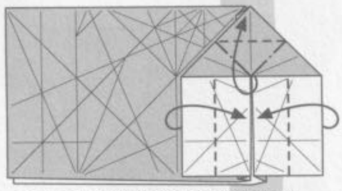
手前の部分を右に
奥の部分を左へ折って平らにする
Fold the layer to the left to front and to the right behind.

28



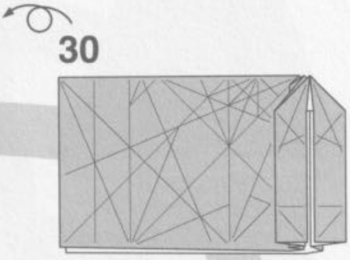
内側をひろげて
つぶすように折る
Open and squash.

29

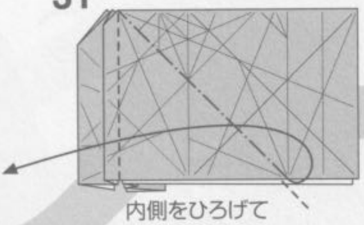


ついている折り筋で折りたたむ
Assemble using the creases.

30

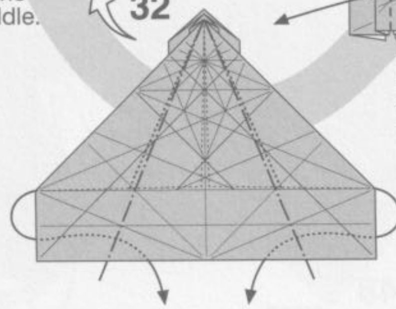


31



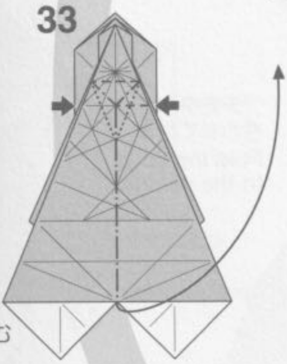
内側をひろげて
つぶすように折る
Open and squash.

32



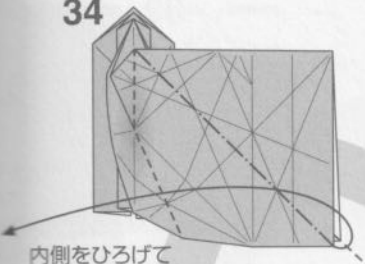
ついている折り筋で
中わり折り
Inside reverse fold along the creases.

33



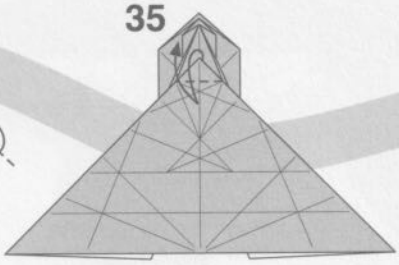
ついている
折り筋で
カドをつまむ
ように折る
Pinch and raise the corner in the middle.

34



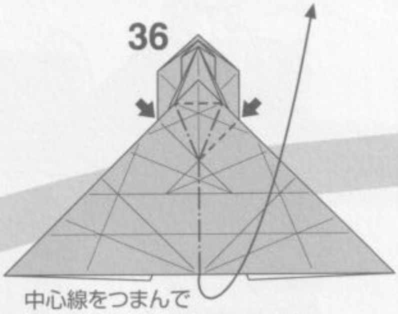
内側をひろげて
つぶすように折る
Open and squash.

35



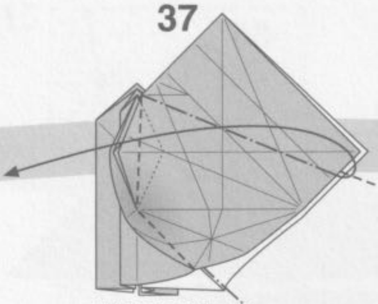
カドを下へ折って折り筋をつける
Fold and unfold.

36



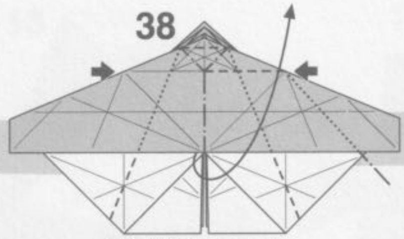
中心線をつまんで
ついている折り筋で折りたたむ
Pinch and raise the corner.

37



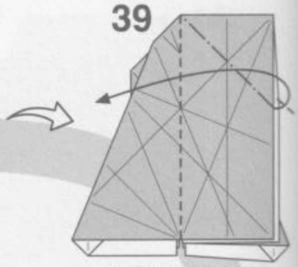
内側をひろげて
つぶすように折る
Open and squash.

38



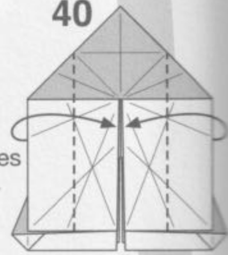
中心線をつまんで
ついている折り筋で
折りたたむ
Push the side edges and raise the layer. A new corner will be made on the top.

39



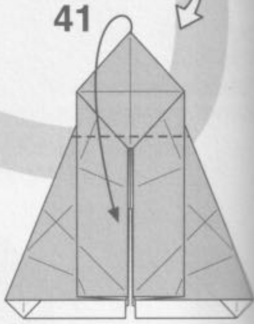
内側をひろげて
つぶすように折る
Open and squash.

40



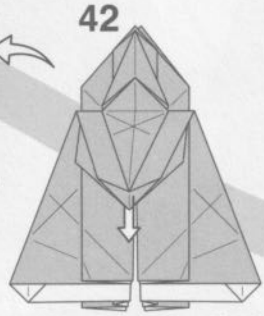
フチを中心に
合わせて折る
Fold the edges to the center.

41



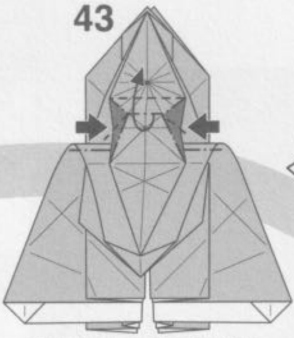
カドを下へ折る
Fold the corner down.

42



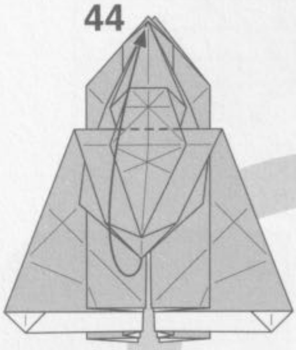
カドをつまんで下へずらす
Pull down and spread the layers.

43



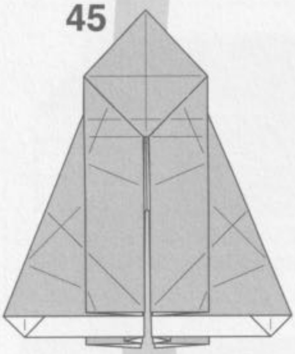
起き上がってきた部分を
ついている折り筋で
図のように押し込んで
折りたたむ
Push the raised area from the sides and fold up as shown with the existing creases.

44

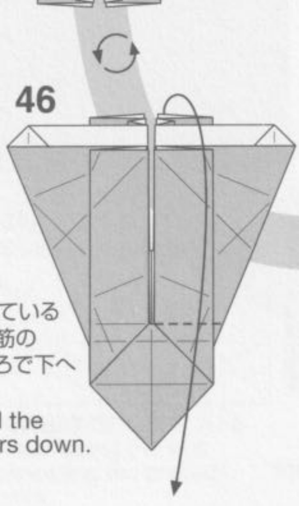


カドを上へ折る
Fold the flap up.

45

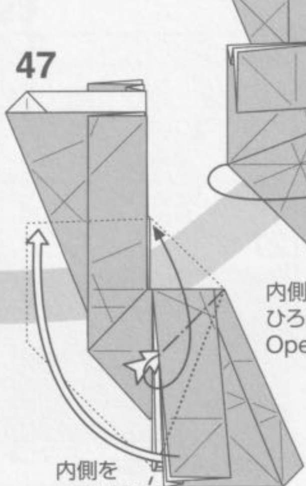


46



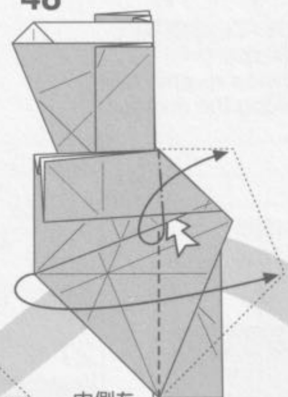
ついている
折り筋の
ところで下へ
折る
Fold the layers down.

47



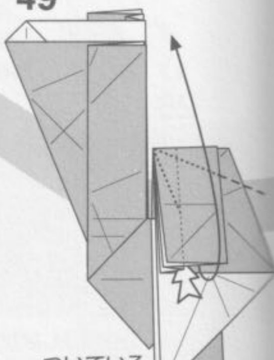
内側を
ひろげて
つぶすように折る
Open and squash.

48



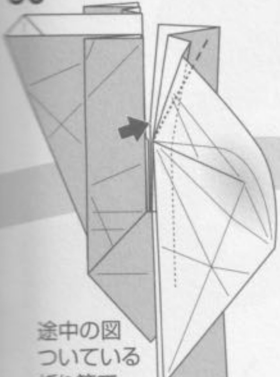
内側を
ひろげて折りたたむ
Open and squash.

49



ついている
折り筋で
内側をひろげて
折りたたむ
Open and squash.

50



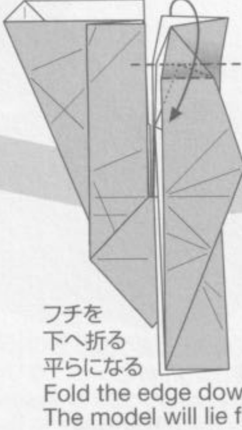
途中の図
ついている
折り筋で
つぶすように折る
In progress...
Squash along
the crease.

51



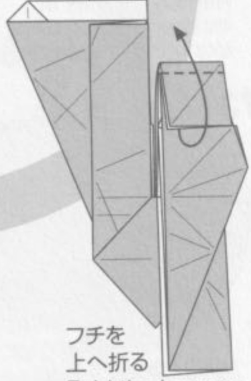
ついている
折り筋で
フチとフチを
合わせて折る
まだ平らにはならない
Fold edge to edge.

52



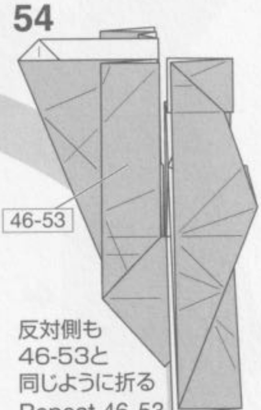
フチを
下へ折る
平らになる
Fold the edge down.
The model will lie flat.

53



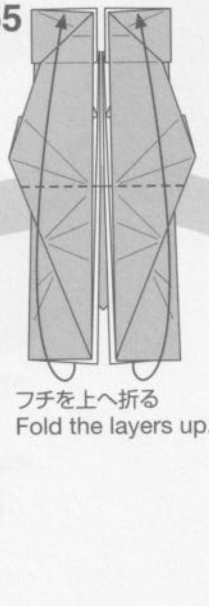
フチを
上へ折る
Fold the layer up.

54



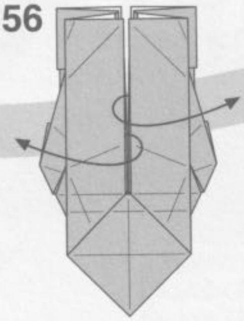
反対側も
46-53と
同じように折る
Repeat 46-53
on the other side.

55



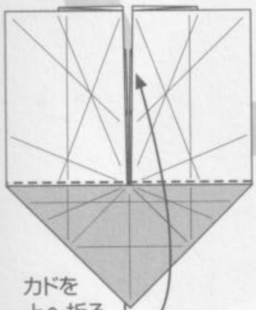
フチを上へ折る
Fold the layers up.

56



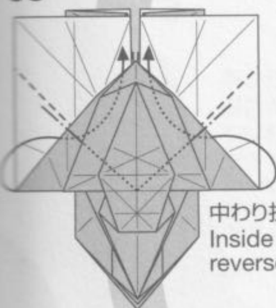
フチをひろげる
Unfold the layers.

57



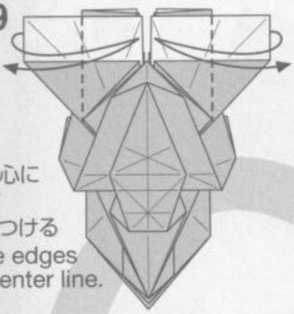
カドを
上へ折る
Fold the flap up.

58



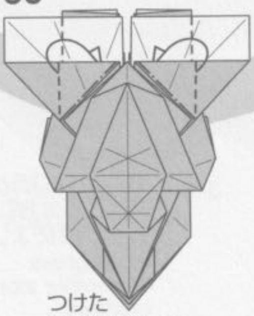
中わり折り
Inside
reverse fold.

59



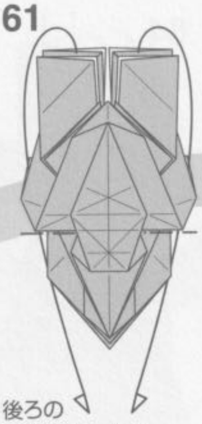
フチを中心に
合わせて
折り筋をつける
Fold the edges
to the center line.
Unfold.

60



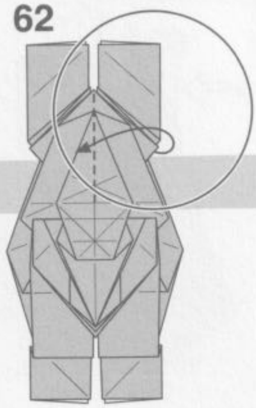
つけた
折り筋を使って
フチを内側に折る
Fold the edges
to inside.

61



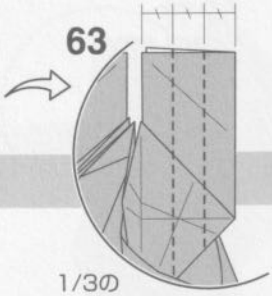
後ろの
フチを下へ折る
Fold the layers
down.

62



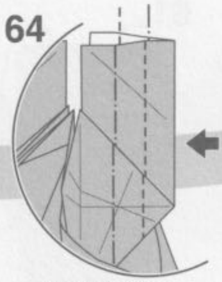
カドを起こす
Raise the layers.

63



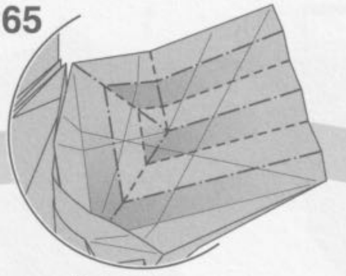
1/3の
幅で折り筋をつける
Fold dividing into thirds and unfold.

64



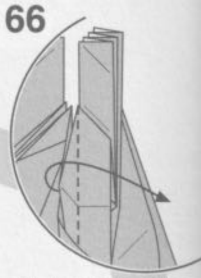
つけた折り筋で
沈めるように段折り
Open sink in and out.

65



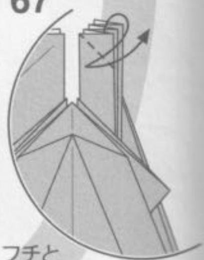
途中の図
図のようにひろげて
折り筋をつけ直して
折りたたむとよい
In progress...
Assemble along creases.

66



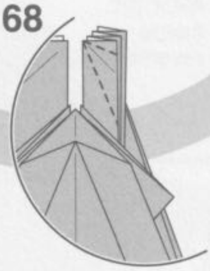
起こしていたカドを戻す
Flatten the layers.

67



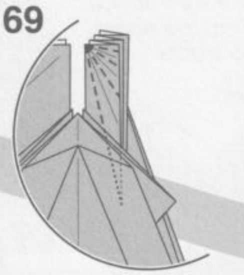
フチと
フチを合わせて
折り筋をつける
Fold edge to edge and unfold.

68



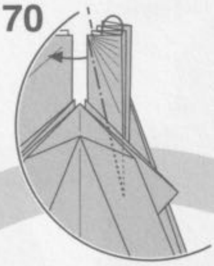
半分の角度で
折り筋をつける
Fold and unfold at angle bisectors.

69



更に半分の角度で
折り筋をつける
Fold and unfold at angle bisectors.

70



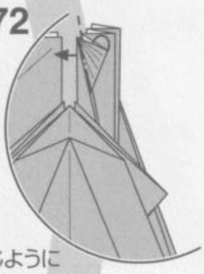
つけた折り筋で
中わり折り
Inside reverse fold.

71



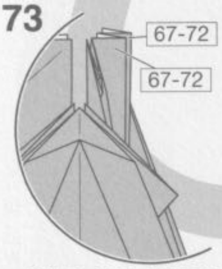
次の折り筋で
中わり折り
Inside reverse fold.

72



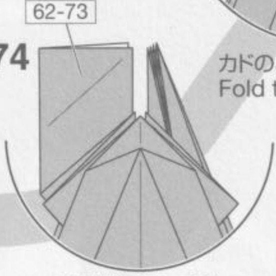
同じように
中わり折りを繰り返して
カドを細くする
Repeat a series of inside reverse folding along the creases.

73



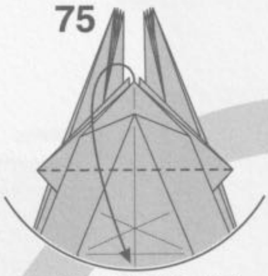
残り2ヶ所も67-72と
同じように折る
Repeat 67-72 on the other layers.

74



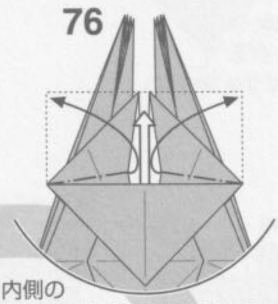
反対側も62-73と
同じように折る
Repeat 62-73 on the other side.

75



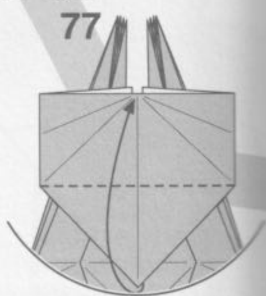
カドのところで下へ折る
Fold the corner down.

76



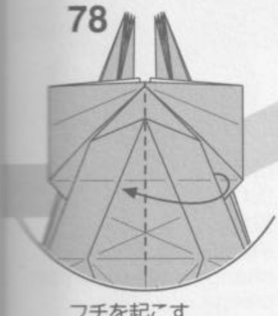
内側の
フチを引き出して折りたたむ
Pull out the inner layer.

77



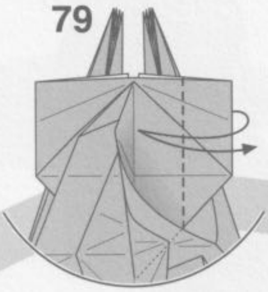
カドを上へ折る
Fold the flap up.

78



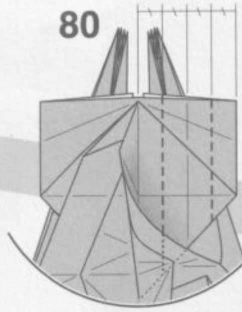
フチを起こす
Raise the layers.

79



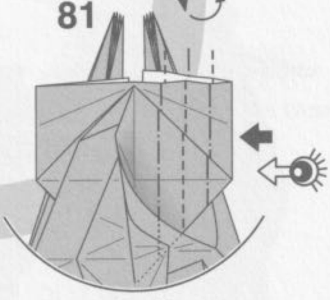
フチを折り筋に
合わせて折り筋を
つける
Fold the edge
to the crease
and unfold.

80



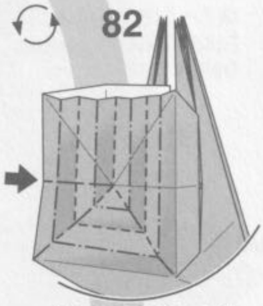
半分の幅で折り筋を
つける
Crease at the
half of the widths.

81



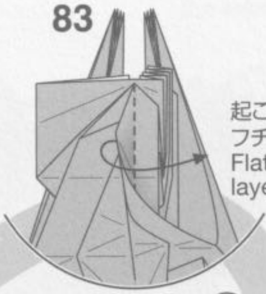
つけた折り筋で
沈めるように段折り
Open sink in and
out.

82



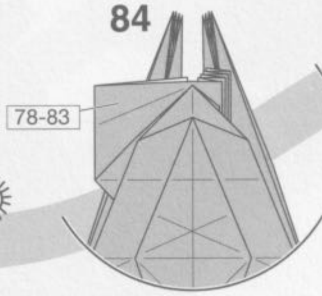
横から見た途中の図
In progress...
Assemble along
creases.

83



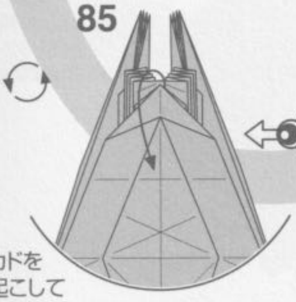
起こしていた
フチを戻す
Flatten the
layers.

84



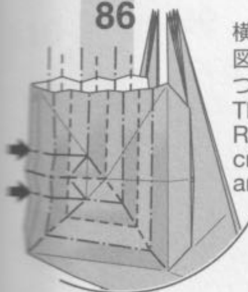
反対側も78-83と
同じように折る
Repeat 78-83
on the other side.

85



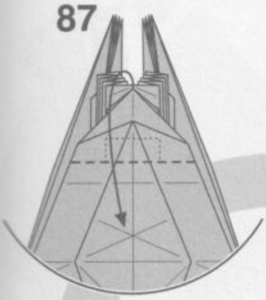
カドを
起こして
内側を次の図のように折りたたむ
Raise the corner up
and assemble as the
next step shows.

86



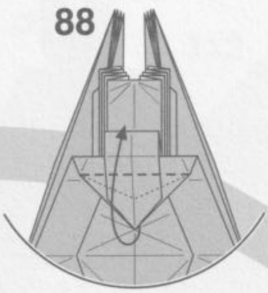
横から見た図
図のように折り筋を
つけ直して折りたたむ
The side view.
Re-creasethe existing
creases as shown
and assemble.

87



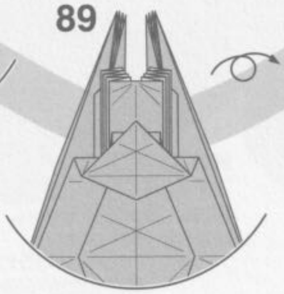
ひらくところで下へ折る
Fold the flap down.

88

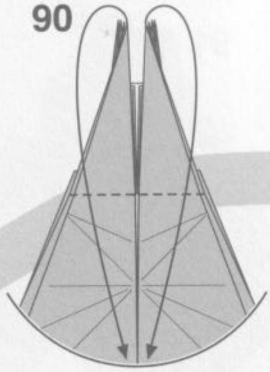


ひらくところで上へ折る
Fold the flap up.

89

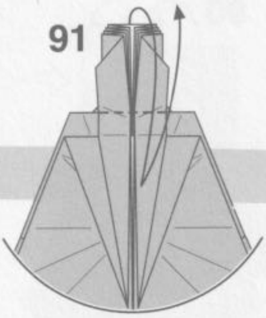


90



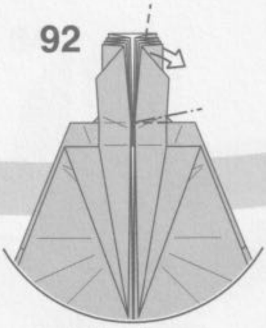
カドを下へ折る
Fold the corners
down.

91



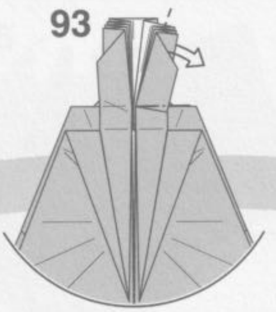
フチのところで
折り筋をつける
Fold and unfold
along the edge.

92



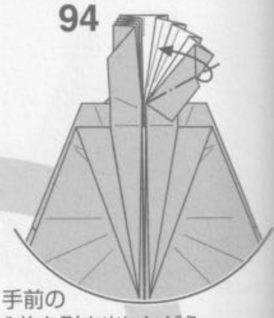
奥の1枚を残して
フチをずらすように折る
Slide down all layers
but the last one.

93



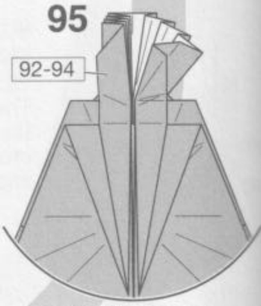
残りのフチも少しずつ
ずらすように折る
Repeat on the
following layers.

94



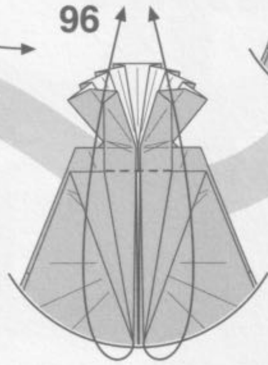
手前の
1枚を引き出しながら
折りたたむ
Pull out the topmost
layer and flatten.

95



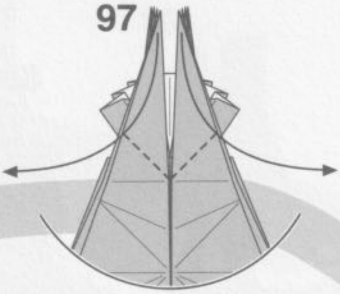
反対側も92-94と
同じように折る
Repeat 92-94
on the other side.

96



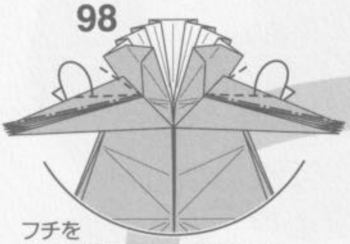
カドを上へ折る
Fold the flaps up.

97



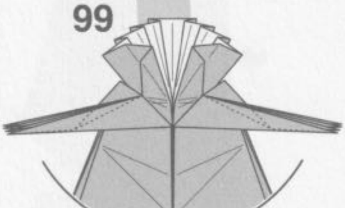
カドを横へ折る
Fold the corners
to the sides.

98

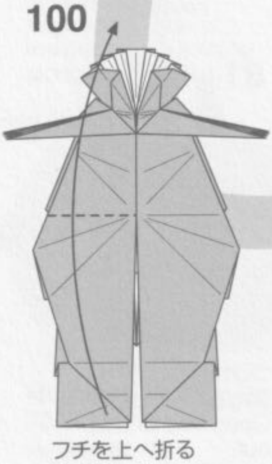


フチを
後ろへ引き寄せるように折る
Fold along the edges
behind and swivel.

99

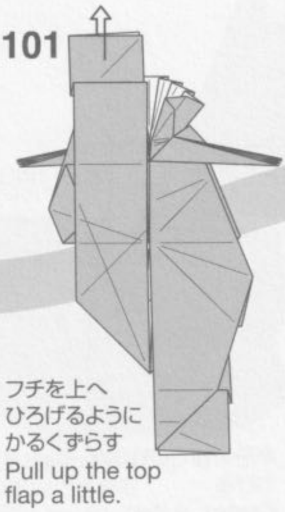


100



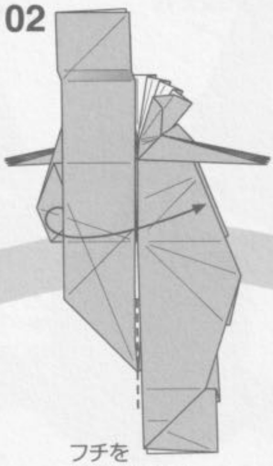
フチを上へ折る
Fold the flap up.

101



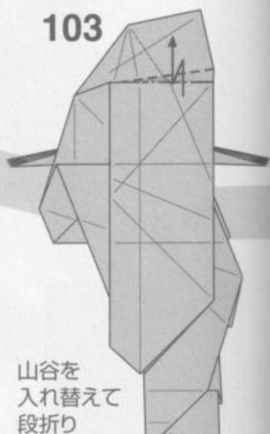
フチを上へ
ひろげるように
かるくずらす
Pull up the top
flap a little.

102



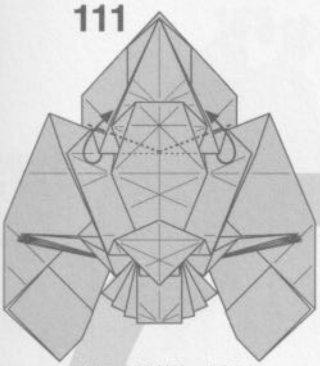
フチを
反対側へ折る
Fold the layer
to the other side.

103



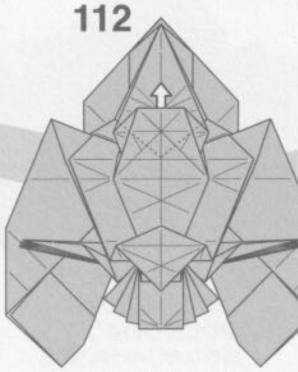
山谷を
入れ替えて
段折り
Pleat while
changing the mountain
crease into valley
and vice versa.

111



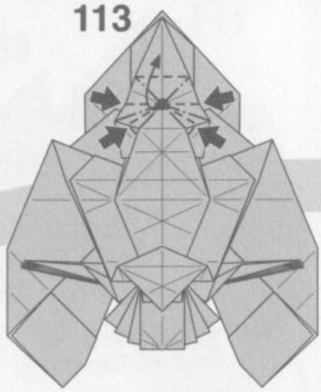
カドを反対側へ折る
Fold the corners up

112



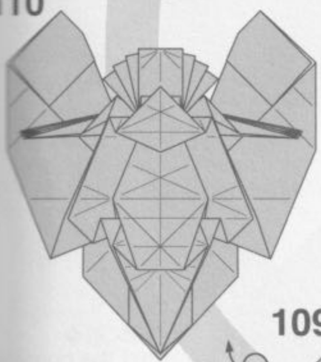
かるくひろげながら
矢印の部分を引き出す
Pull and spread
the layers a little.

113

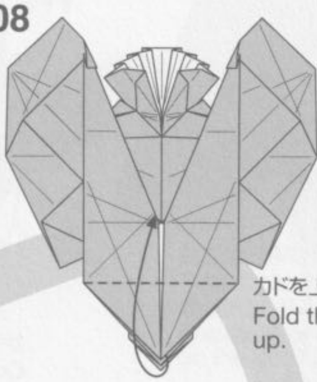


横から押し込みながら
●をカドにしてついている
折り筋で折りたたむ
Push the sides and
make the dotted point
a new corner with
the existing creases.

110

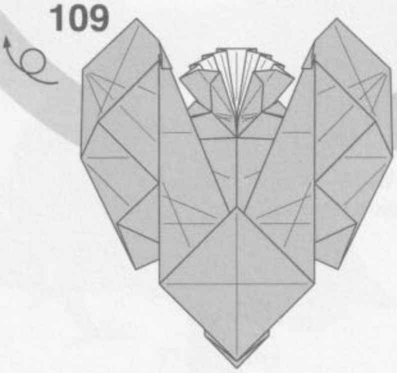


108

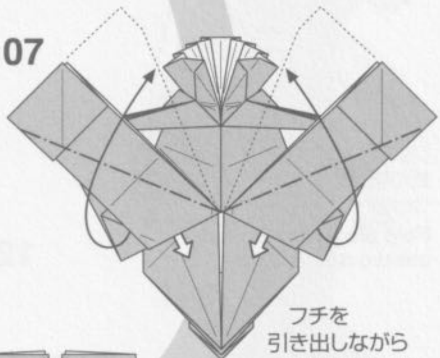


カドを上へ折る
Fold the corner
up.

109

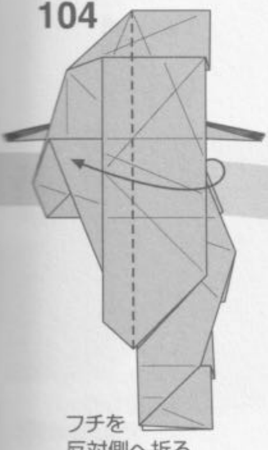


107



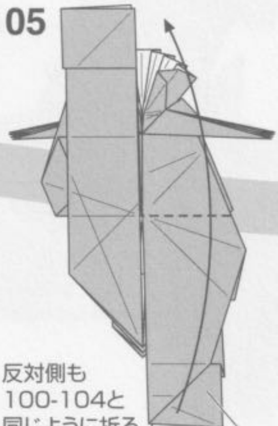
フチを
引き出しながら
上へ折りたたむ
Pull out the layer
and squash.

104



フチを
反対側へ折る
Fold the layer
to the other side.

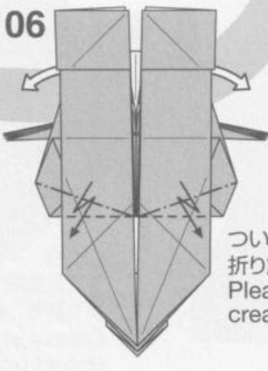
105



反対側も
100-104と
同じように折る
Repeat 100-104
on the other side.

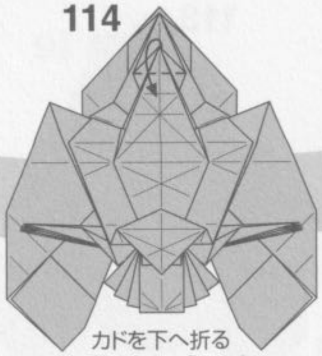
100-104

106



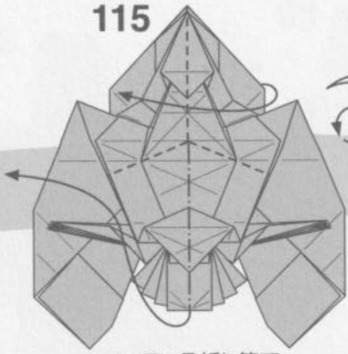
ついている
折り筋で段折り
Pleat using the
creases.

114



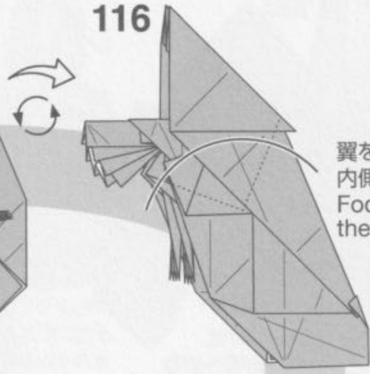
カドを下へ折る
Fold the flap down.

115



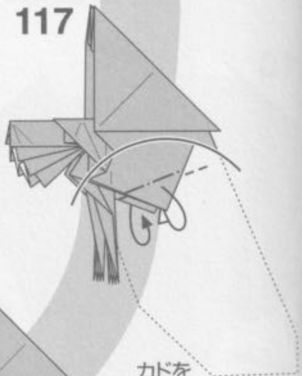
ついている折り筋で
中わり折りのように
折りながら半分に折る
Fold the model in half,
while giving an inside
reverse fold.

116

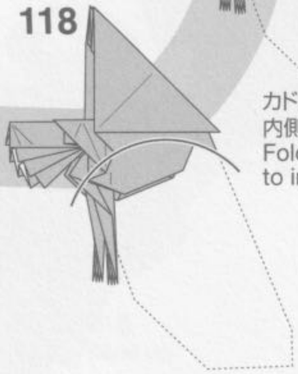


翼を透過して
内側を見る
Focus on
the inner part.

117

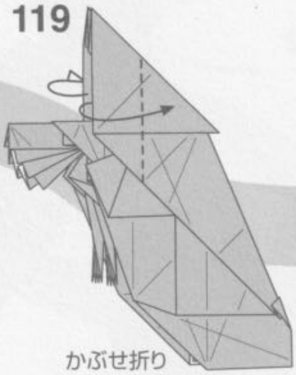


118



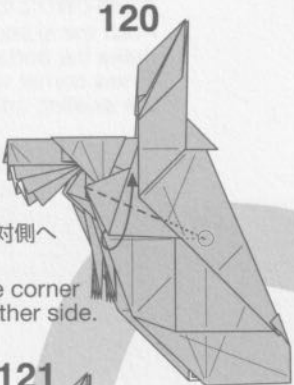
カドを
内側に折る
Fold the corners
to inside.

119



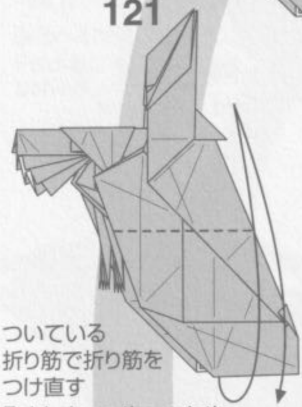
かぶせ折り
Outside reverse fold.

120



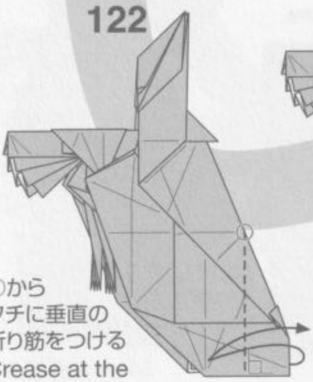
カドを反対側へ
折る
Fold the corner
to the other side.

121



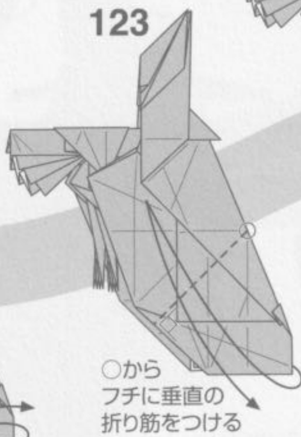
ついている
折り筋で折り筋を
つけ直す
Fold along the existing
crease and unfold.

122



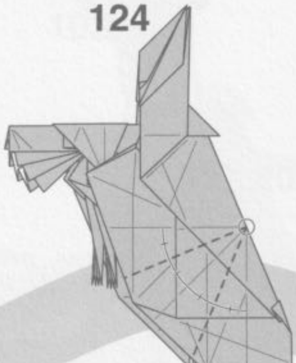
○から
フチに垂直の
折り筋をつける
Crease at the
circled point.

123



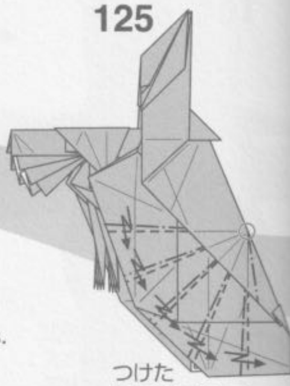
○から
フチに垂直の
折り筋をつける
Crease at the
circled point.

124

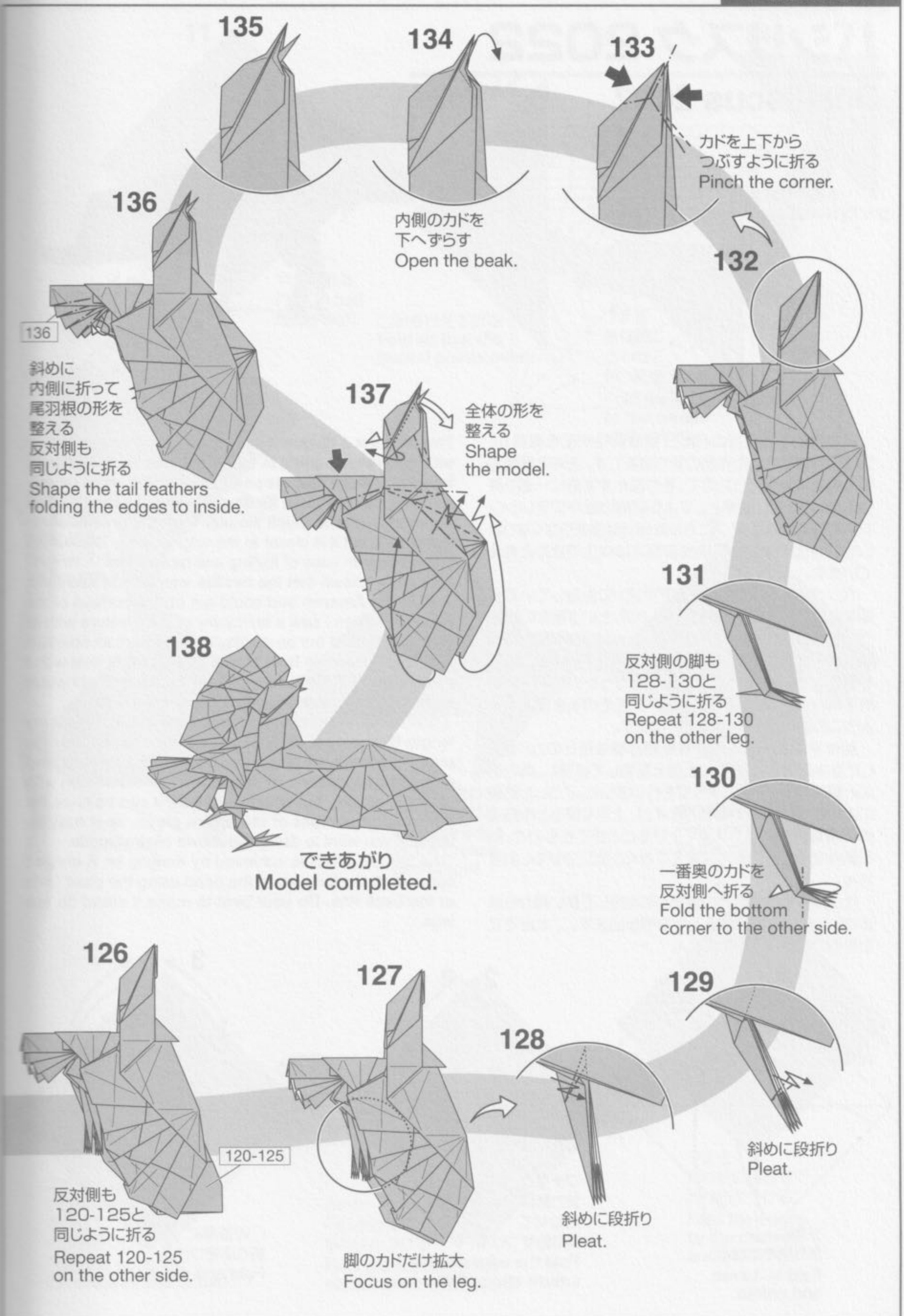


半分の角度で
折り筋をつける
Fold and unfold
at angle bisectors.

125



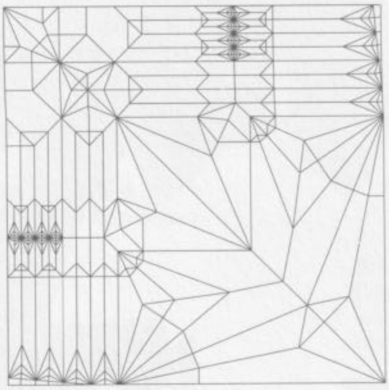
つけた
折り筋を使って
ずらすように段折り
Pleat using the
crease lines
as references..


126
反対側も
120-125と
同じように折る
Repeat 120-125
on the other side.
120-125
127
脚のカドだけ拡大
Focus on the leg.
128
斜めに段折り
Pleat.
129
斜めに段折り
Pleat.
130
一番奥のカドを
反対側へ折る
Fold the bottom
corner to the other side.
131
反対側の脚も
128-130と
同じように折る
Repeat 128-130
on the other leg.
132
133
カドを上下から
つぶすように折る
Pinch the corner.
134
内側のカドを
下へずらす
Open the beak.
135
136
136
斜めに
内側に折って
尾羽根の形を
整える
反対側も
同じように折る
Shape the tail feathers
folding the edges to inside.
137
全体の形を
整える
Shape
the model.
138
できあがり
Model completed.

バシリスク 2022

Basiliscus 2022

Created in 2022





推奨用紙 50cm

日本折紙学会発行の『第21期会員特別配布資料』に展開図が掲載された作品の折り図版です。当時の展開図版は無駄に複雑だったので、折り図化する際に一通り改修を行いました。結果としてより初期の試作に近いシンプルな構造になり、テクニカルな部分はあまりなくなりましたが、折りやすさと再現性の高さは向上できたと考えています。

バシリスクという生き物はアマゾンに生息していて水面を走ることができる変わったトカゲ、という程度の認識でしたが、2010年にアメリカのニューヨーク自然史博物館に展示されていた、背中のヒレをひろげた状態の剥製を見て、こんなにかっこいい生き物だったのかと一目惚れをして、頭に焼き付けたイメージをそのまま出力するように創作したのをよく覚えています。

創作手順としては、まず最低限必要な長さのカドを出した基本形を作り、2辺に蛇腹を配置して拡張し、指の追加と頭部のディテールアップを行いました。こうした蛇腹による拡張は単純ではありますが、上手く使うと作品全体の情報量をバランスよく上げることができるので、折紙創作を志している方は覚えておくと役立つかもしれません。

仕上げは背中のひれの段折りも利用して長い尾から頭までにS字の曲線を作ると生命感が出ます。二本足で立たせるのは頑張ってください。

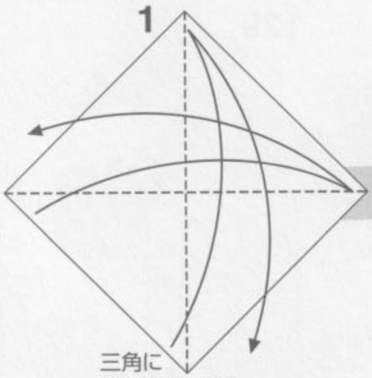
This model is a diagrammed version of the one published with the crease pattern in the JOAS 21st Term Members' Special Issue. The crease pattern was excessively complex, so I revised it for diagramming. It turned out that the model here is much simpler than the previous one technically, but it is closer to the original idea. The current one is better in ease of folding and replicability.

I had only known that the basilisk was an odd lizard that lived in the Amazon and could run on the surface of the water, but when I saw a taxidermy of the creature with its back fins spread out on display at the American Museum of Natural History in New York in 2010, I fell in love with it at first sight. I designed my basilisk model so that I would reproduce the image imprinted on my mind then.

I first made a base form with the minimum necessary length for the necessary flaps, and then expanded it by placing pleats on two sides for adding fingers and detailed expressions of the head. The expansion with pleats is simple, but when used well, it can balance the information content of the entire piece, so it may be useful if you want to design your own original mode.

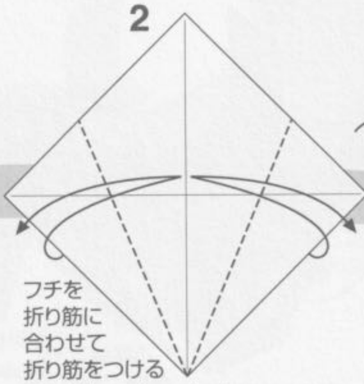
The life-like effect is achieved by making an S-shaped curve from the long tail to the head using the pleat folds of the back fins. Do your best to make it stand on two legs.

1



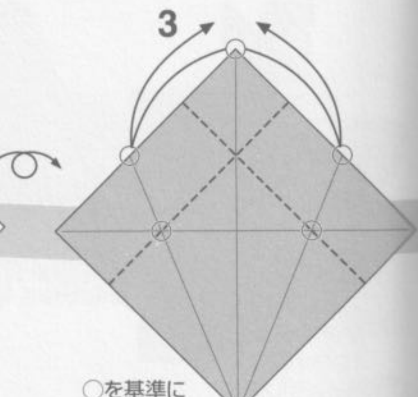
三角に
折り筋をつける
Fold in halves
and unfold.

2



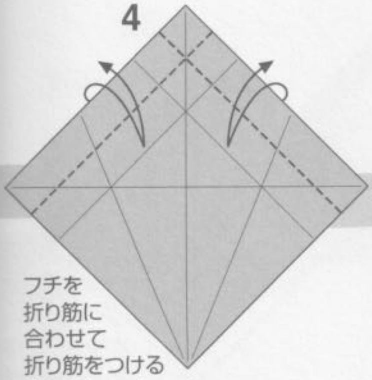
フチを
折り筋に
合わせて
折り筋をつける
Fold the edges to the
crease and unfold.

3



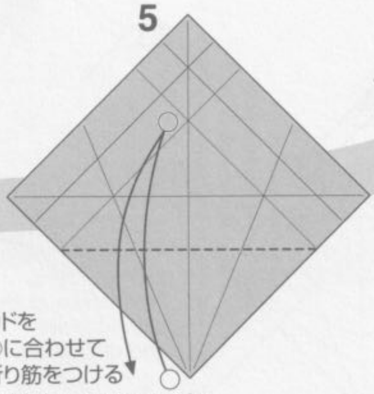
○を基準に
折り筋をつける
Fold and unfold.

4



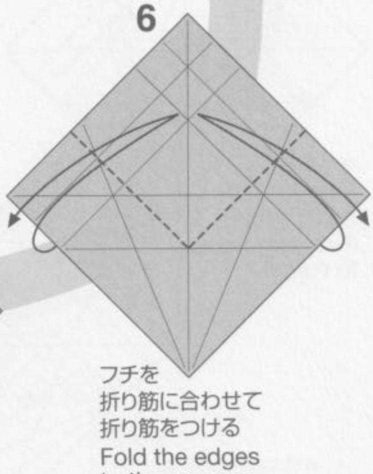
フチを
折り筋に
合わせて
折り筋をつける
Fold the edges to
the creases and unfold.

5



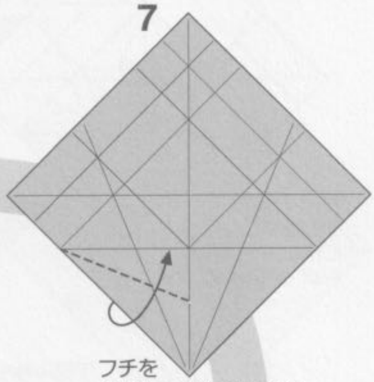
カドを
○に合わせて
折り筋をつける
Fold the corner to the
circled point and unfold.

6



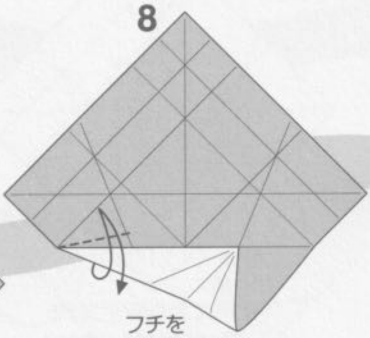
フチを
折り筋に合わせて
折り筋をつける
Fold the edges
to the creases
and unfold.

7



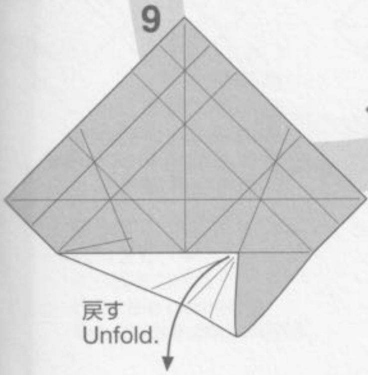
フチを
折り筋に合わせて折る
Fold the edge
to the crease.

8



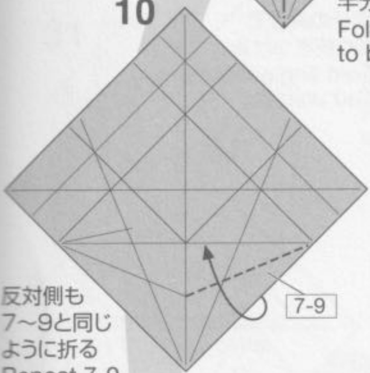
フチを
折り筋に合わせて
折り筋をつける
Fold the edge
to the crease
and unfold.

9



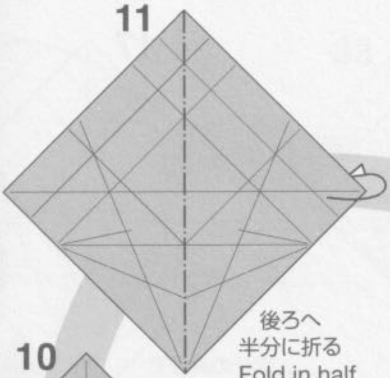
戻す
Unfold.

10



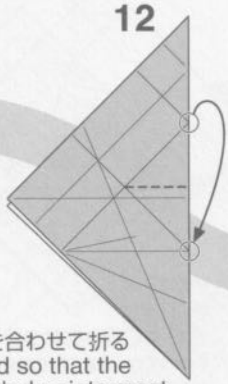
反対側も
7〜9と同じ
ように折る
Repeat 7-9
on the other side.

11



後ろへ
半分に折る
Fold in half
to behind.

12



○を合わせて折る
Fold so that the
circled points meet.

13



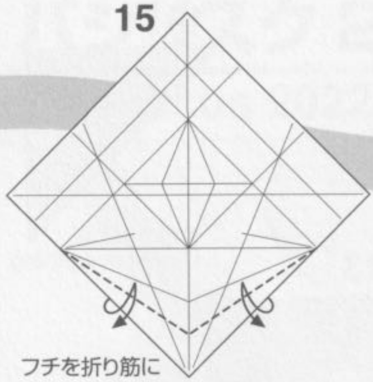
フチを
折り筋に
合わせて
折り筋をつける
Fold the edge
to the crease
and unfold.

14



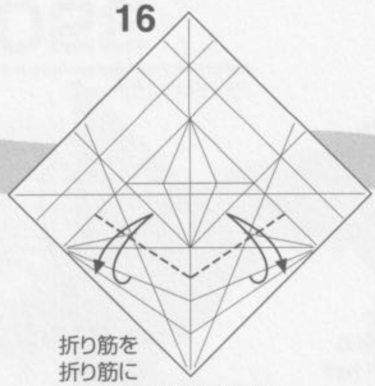
全部ひろげる
Unfold everything.

15



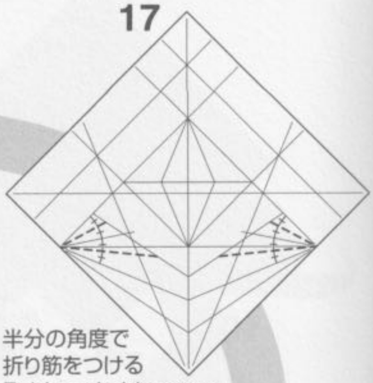
フチを折り筋に
合わせて折り筋をつける
Fold the edges to the
creases and unfold.

16



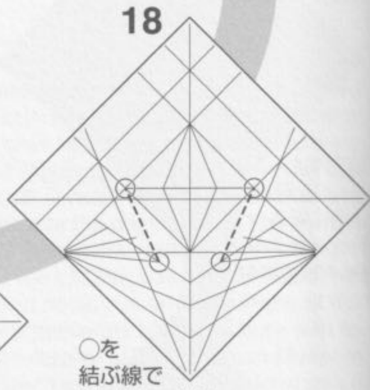
折り筋を
折り筋に
合わせて折り筋をつける
Fold crease to crease
and unfold.

17



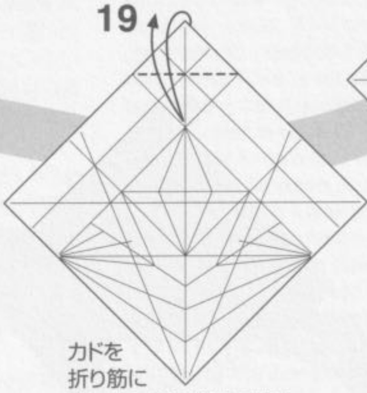
半分の角度で
折り筋をつける
Fold angle bisectors
and unfold.

18



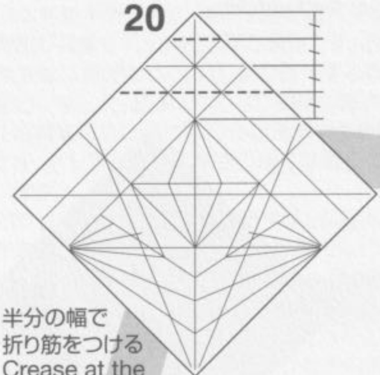
○を
結ぶ線で
折り筋をつける
Fold along the lines
connecting the circled
points and unfold.

19



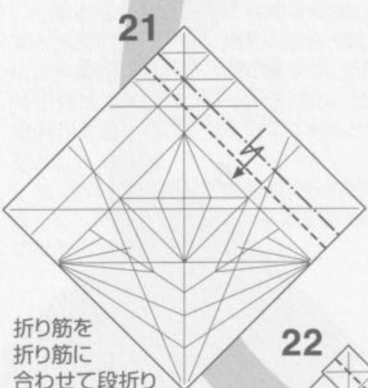
カドを
折り筋に
合わせて折り筋をつける
Fold corner to crease
and unfold.

20



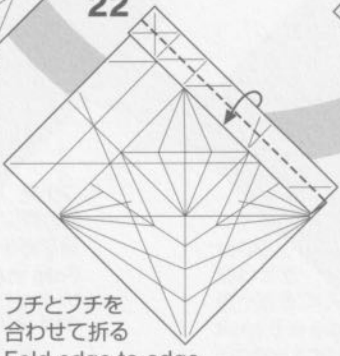
半分の幅で
折り筋をつける
Crease at the
half of the width.

21



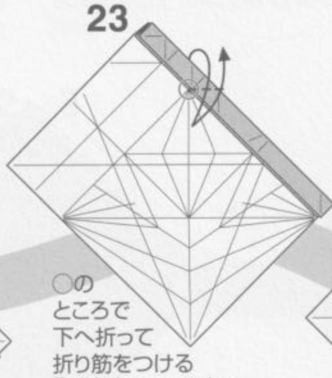
折り筋を
折り筋に
合わせて段折り
Pleat fold crease
to crease.

22



フチとフチを
合わせて折る
Fold edge to edge.

23



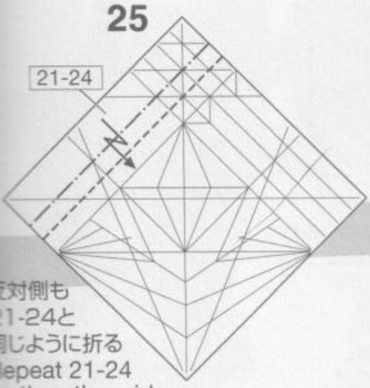
○の
ところで
下へ折って
折り筋をつける
Fold down at the
circled point
and unfold.

24



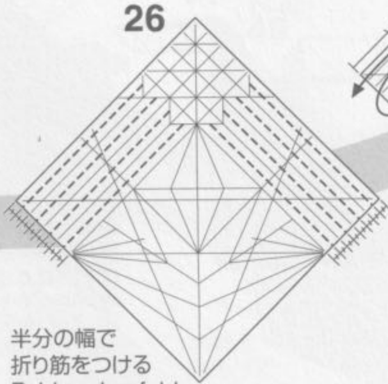
全部ひろげる
Unfold everything.

25



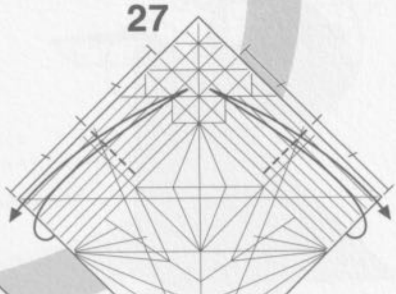
反対側も
21-24と
同じように折る
Repeat 21-24
on the other side.

26



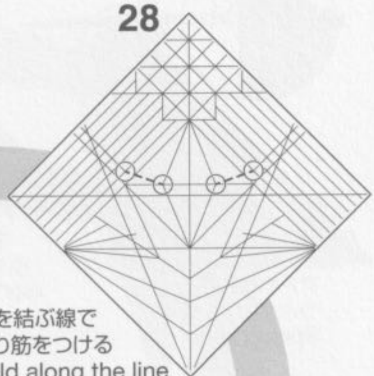
半分の幅で
折り筋をつける
Fold and unfold
at half of the width.

27



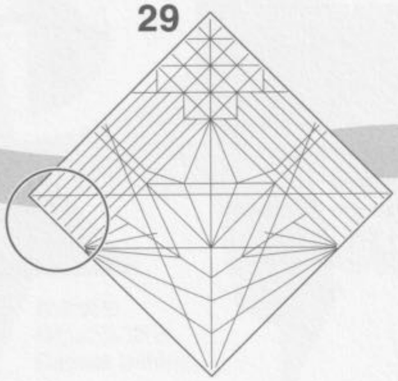
フチを
折り筋に合わせて
折り筋をつける
Fold the edges to the
creases and unfold.

28

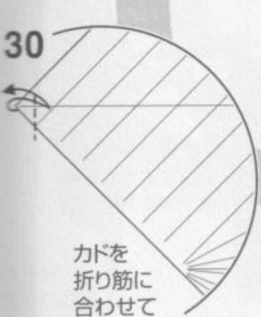


○を結ぶ線で
折り筋をつける
Fold along the line
connecting the circled
points and unfold.

29

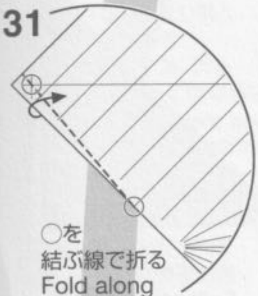


30



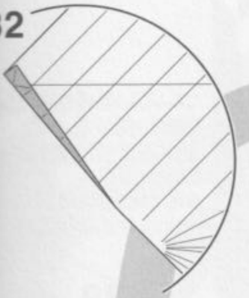
カドを
折り筋に
合わせて
折り筋をつける
Fold the corner to
the crease and unfold.

31

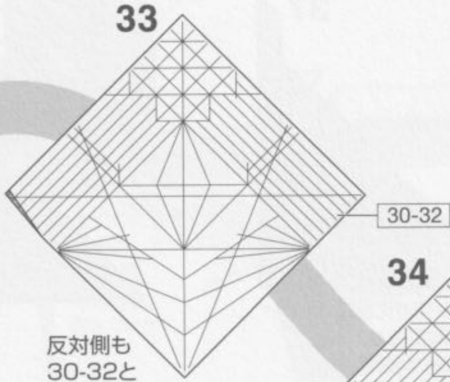


○を
結ぶ線で折る
Fold along
the line connecting
the circled points.

32

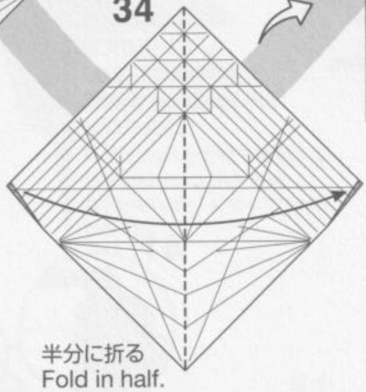


33



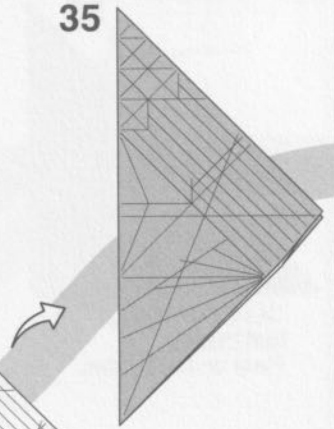
反対側も
30-32と
同じように折る
Repeat 30-32
on the other side.

34

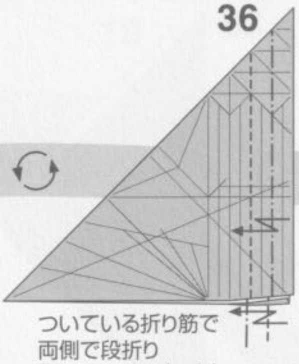


半分に折る
Fold in half.

35

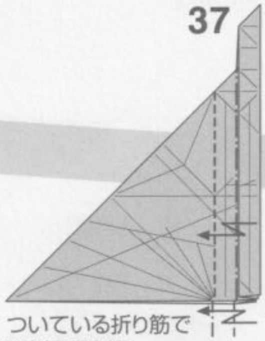


36



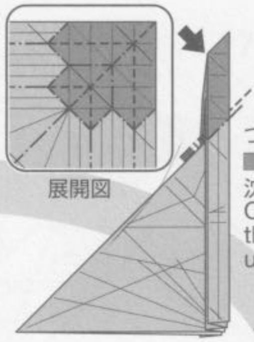
ついている折り筋で
両側で段折り
Pleat on both sides.

37



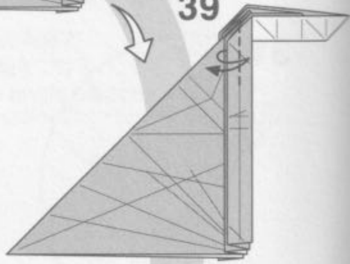
ついている折り筋で
両側で段折り
Pleat on both sides.

38



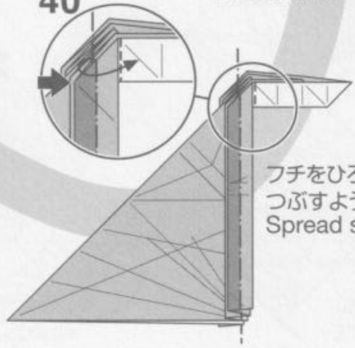
ついている折り筋で
■の部分を
沈めるように折る
Open sink
the darkened area
using the creases.

39



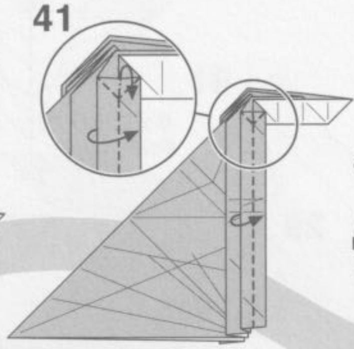
フチとフチを合わせて
折り筋をつける
Fold edge to edge
and unfold.

40



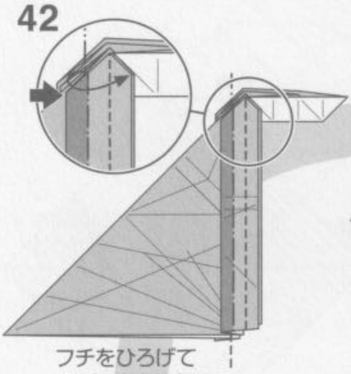
フチをひろげて
つぶすように折る
Spread sink.

41



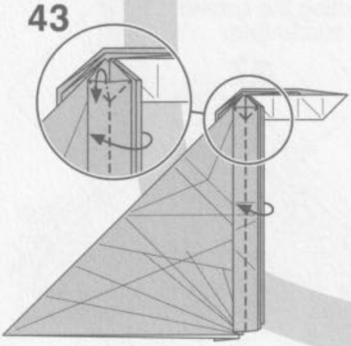
フチとフチを合わせて
折りたたむ
Raise the top layer
and fold the flap
to the other side.

42



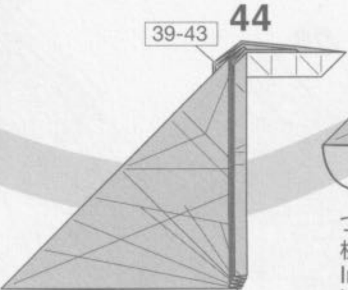
フチをひろげて
つぶすように折る
Spread sink.

43



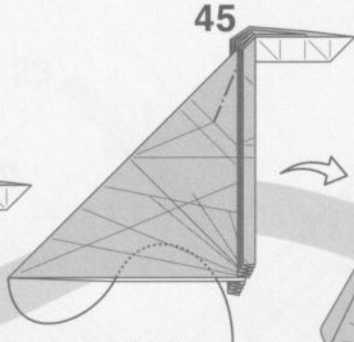
フチとフチを合わせて
折りたたむ
Raise the top layer
and fold the layers
to the other side.

44



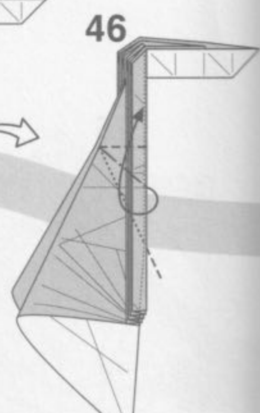
反対側も39-43と
同じように折る
Repeat 39-43
behind.

45



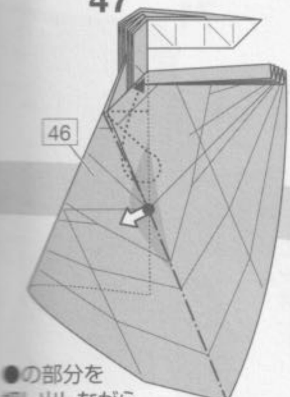
ついている折り筋で
根本の部分だけ中わり折り
Inside reverse fold,
but fold only at the
existing creases.
Do not make any
new crease lines.
The model will not
lie flat.

46



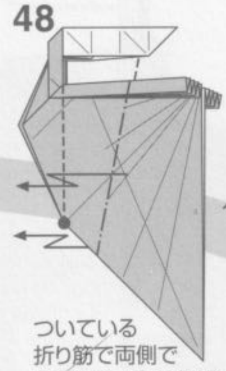
ついている
折り筋でひろげて
つぶすように折る
Open and squash
using the creases.

47



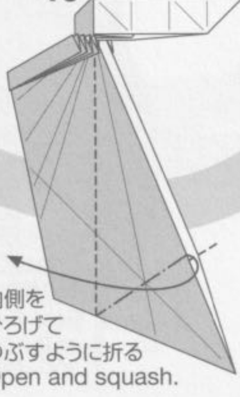
●の部分を
押し出しながら
反対側も46と同じように折る
Repeat 46 behind and
pull out the dotted point.

48



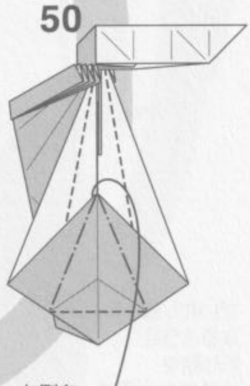
ついている
折り筋で両側で
かぶせるように段折り
Pleat on both sides
using the creases.

49



内側を
ひろげて
つぶすように折る
Open and squash.

50



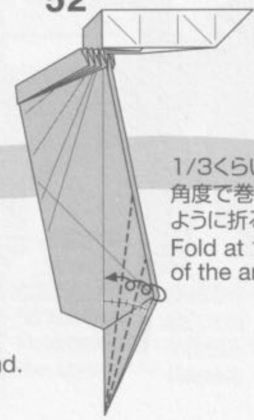
内側を
ひろげて
つぶすように折る
Petal fold.

51



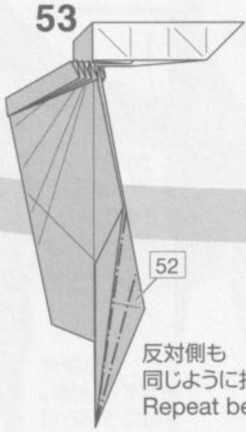
反対側へ折る
Fold the flap
to the other
side.

52



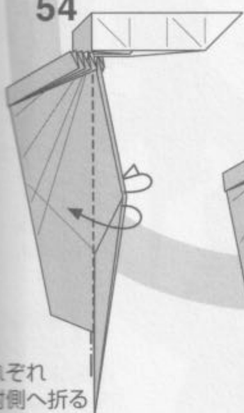
1/3くらいの
角度で巻く
ように折る
Fold at 1/3
of the angle.

53



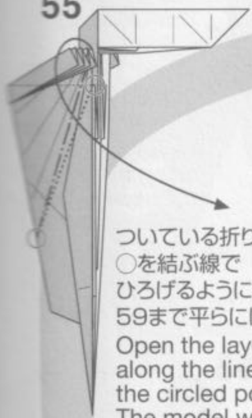
反対側も
同じように折る
Repeat behind.

54



それぞれ
反対側へ折る
Fold the flaps
to the other side.

55



ついている折り筋と
○を結ぶ線で
ひろげるように折る
59まで平らにはならない
Open the layers and fold
along the line connecting
the circled points.
The model will not lie flat
until 59.

56



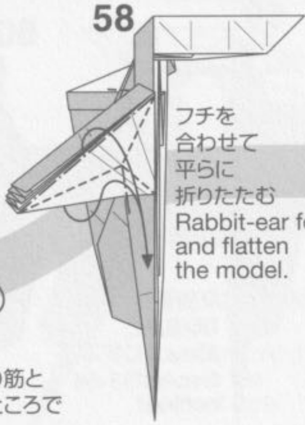
全てのヒダを
引き出して
ひろげる
Release
the layers.

57



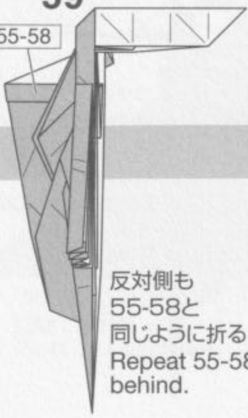
ついている折り筋と
後ろのフチのところで
折りたたむ
Fold using the existing
crease and the line
connecting the circled
points.

58



フチを
合わせて
平らに
折りたたむ
Rabbit-ear fold
and flatten
the model.

59



反対側も
55-58と
同じように折る
Repeat 55-58
behind.

60



カドを
下へ折る
Fold down
the flap.

61



ヒダを
かるく起こす
64まで平らに
ならない
Open the layers.
The model will
not lie flat until 64.

62



後ろのヒダを
かるく起こして
○を結ぶ線
(ついている折り筋)
で折る
Unfold the hidden
layers and fold
along the line
connecting the
circled points.

63



ヒダを戻しながら
カドを上へ折って
平らに折りたたむ
Fold up
the flap
and flatten
the model.

64



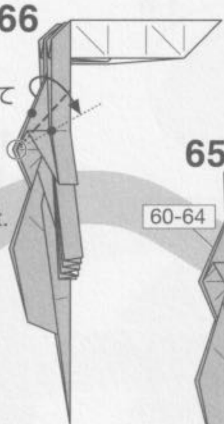
カドを
下へ折る
Fold down
the flap.

65



反対側も
60-64と
同じように折る
Repeat 60-64
behind.

66



○のところから
フチを●に合わせて
折る
Fold the dotted
edge onto the
dotted point at
the circled point.

67



○のところから
次の図を参考に折る
Fold at the
circled point
as shown in 68

68



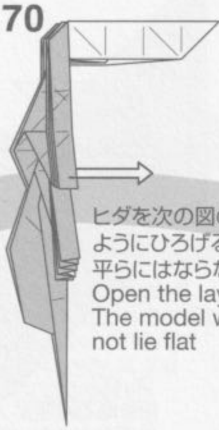
だいたい直角に
なるように
折り筋を
つけてから戻す
Make sure that
the angle shown
is approximately
90 degrees. Unfold.

69



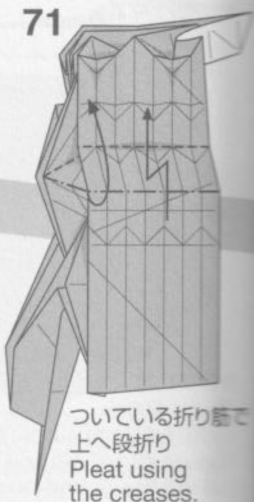
フチを折り筋に
合わせて
折り筋をつける
Fold the edge
to the crease
and unfold.

70



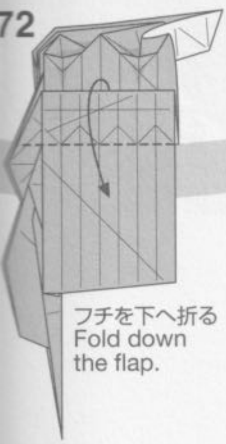
ヒダを次の図の
ようにひろげる
平らにはならない
Open the layers.
The model will
not lie flat

71



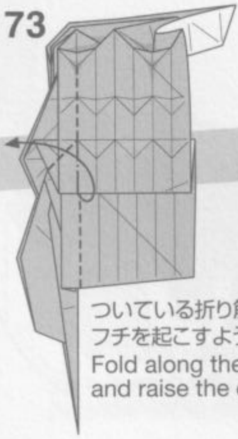
ついている折り筋で
上へ段折り
Pleat using
the creases.

72



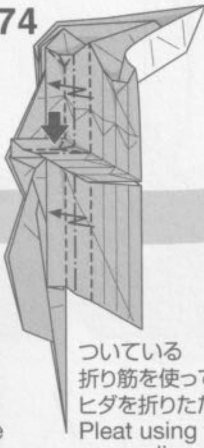
フチを下へ折る
Fold down
the flap.

73



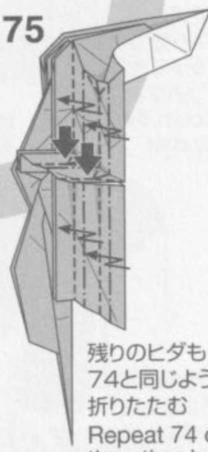
ついている折り筋で
フチを起こすように折る
Fold along the crease
and raise the edges.

74



ついている
折り筋を使って
ヒダを折りたたむ
Pleat using the
crease lines.

75



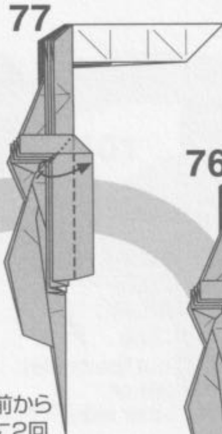
残りのヒダも
74と同じように
折りたたむ
Repeat 74 on
the other layers.

76



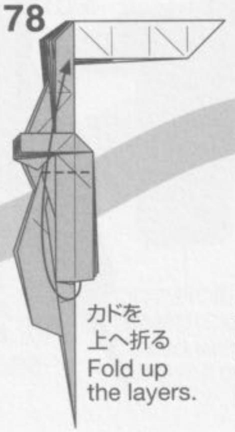
手前の1枚を
引き出しながら
反対側へひろげる
Pull out the
top layer.

77



手前から
順に2回
76と同じように折る
Repeat 76 twice.

78



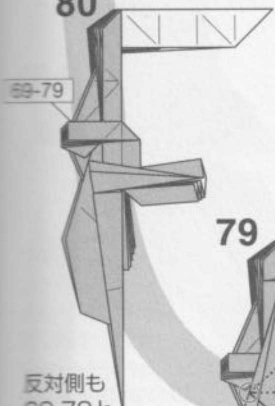
カドを
上へ折る
Fold up
the layers.

79



手前から
3枚目のすき間で
ひろげてつぶす
ように折る
Open the third
layer and squash.

80



反対側も
69-79と
同じように折る
Repeat 69-79
behind.

81



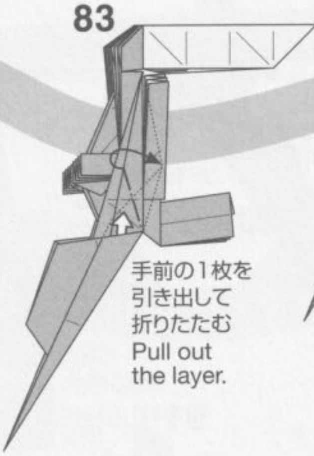
両側で
かぶせるように
段折り
Crimp on
both sides.

82



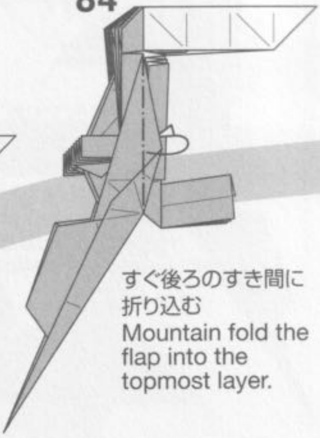
カドを戻す
Unfold
the corner.

83

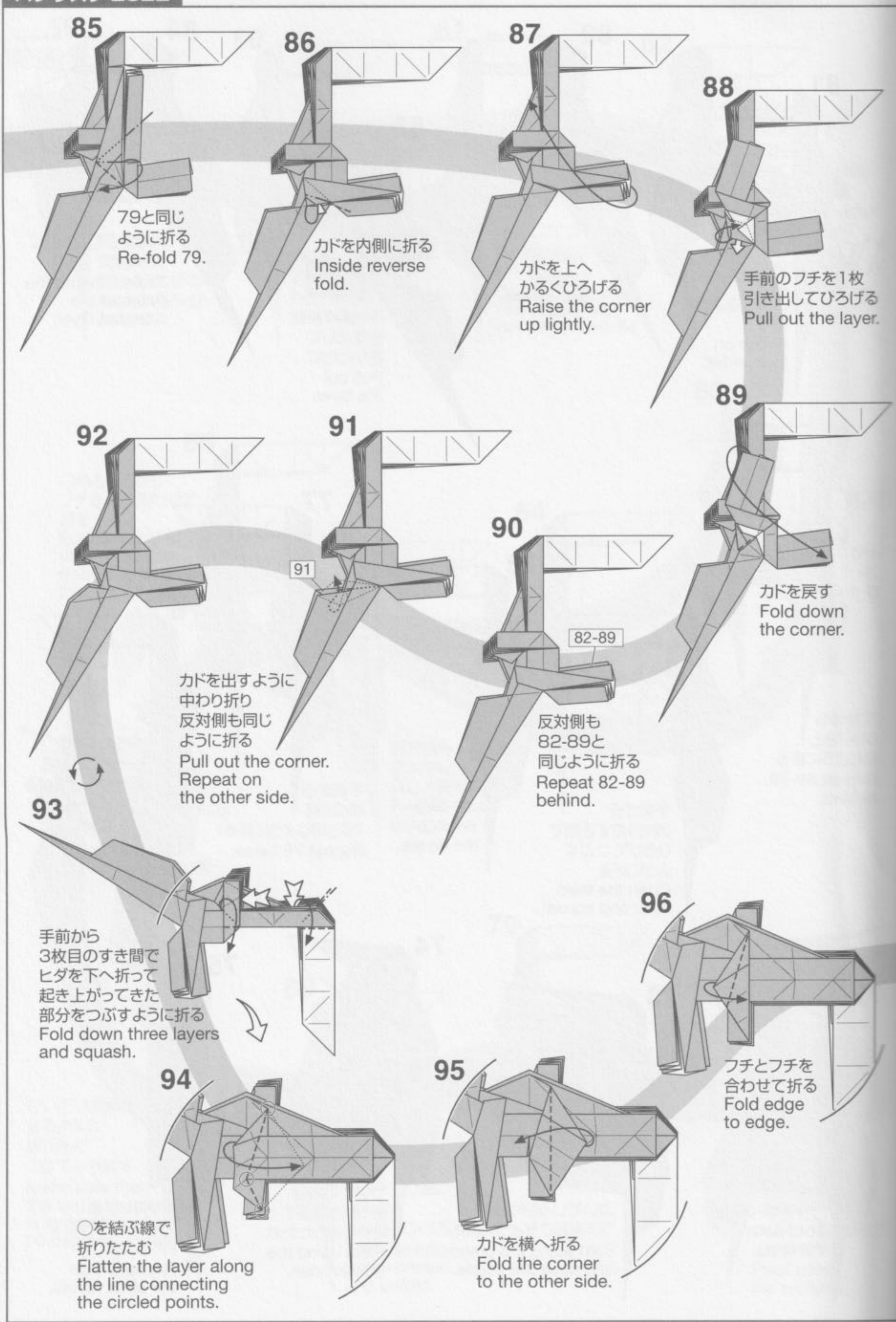


手前の1枚を
引き出して
折りたたむ
Pull out
the layer.

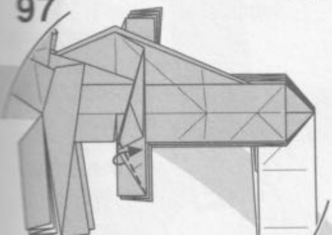
84



すぐ後ろのすき間に
折り込む
Mountain fold the
flap into the
topmost layer.

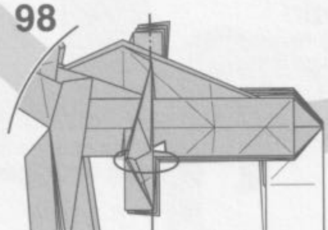

85
79と同じ
ように折る
Re-fold 79.
86
カドを内側に折る
Inside reverse
fold.
87
カドを上へ
かるくひろげる
Raise the corner
up lightly.
88
手前のフチを1枚
引き出してひろげる
Pull out the layer.
89
カドを戻す
Fold down
the corner.
90
82-89
反対側も
82-89と
同じように折る
Repeat 82-89
behind.
91
91
カドを出すように
中わり折り
反対側も同じ
ように折る
Pull out the corner.
Repeat on
the other side.
92
93
手前から
3枚目のすき間で
ヒダを下へ折って
起き上がってきた
部分をつぶすように折る
Fold down three layers
and squash.
94
○を結ぶ線で
折りたたむ
Flatten the layer along
the line connecting
the circled points.
95
カドを横へ折る
Fold the corner
to the other side.
96
フチとフチを
合わせて折る
Fold edge
to edge.

97



後ろのフチの
ところで折る
Fold along
the edge behind.

98



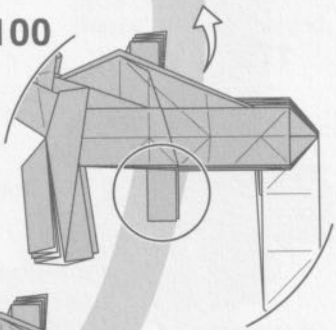
カドをすき間に折り込む
Fold the corner inside.

99

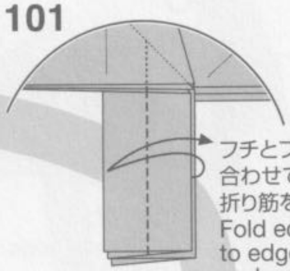


ヒダを反対側へ折って
起き上がってきた部分を
つぶすように折る
Fold the layers to the other
side and squash.

100

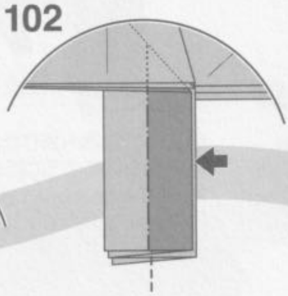


101



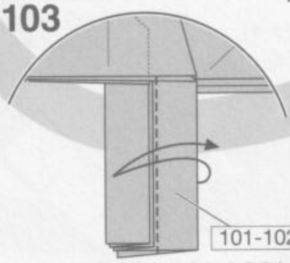
フチとフチを
合わせて
折り筋をつける
Fold edge
to edge
and unfold.

102



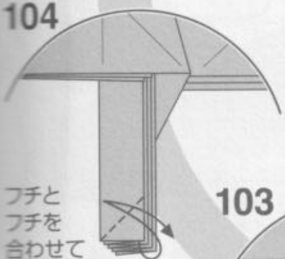
つけた折り筋で
沈め折り(Closed sink)
Closed sink
along the creases.

103



もう1枚も101-102と
同じように折る
Repeat 101-102
on the other layer.

104



フチと
フチを
合わせて
折り筋をつける
Fold edge to
edge and unfold.

105



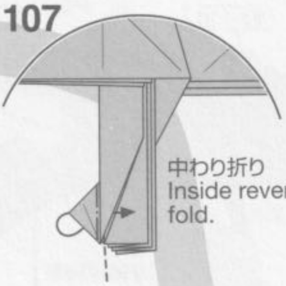
半分の角度で
折り筋をつける
Fold and unfold
at angle bisectors.

106



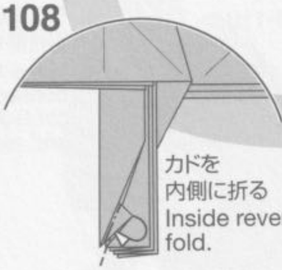
つけた折り筋で
中わり折り
Inside reverse
fold.

107



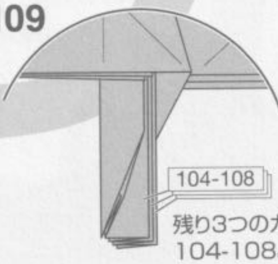
中わり折り
Inside reverse
fold.

108



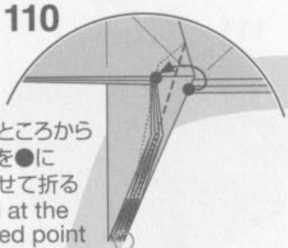
カドを
内側に折る
Inside reverse
fold.

109



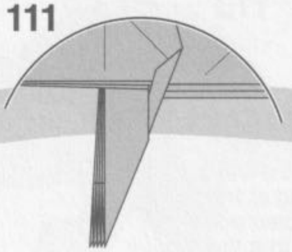
残り3つのカドも
104-108と
同じように折る
Repeat 104-108
on the other layers.

110

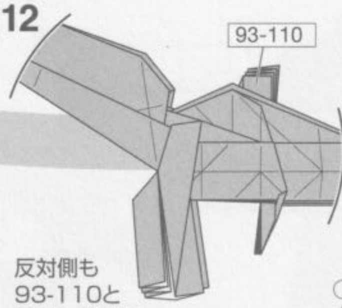


○のところから
フチを●に
合わせて折る
Fold at the
circled point
so that the two
dotted points will meet.

111

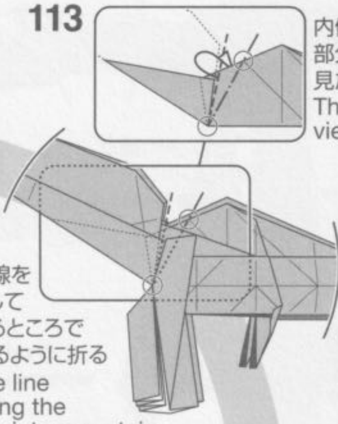


112



反対側も
93-110と
同じように折る
Repeat 93-110
behind.

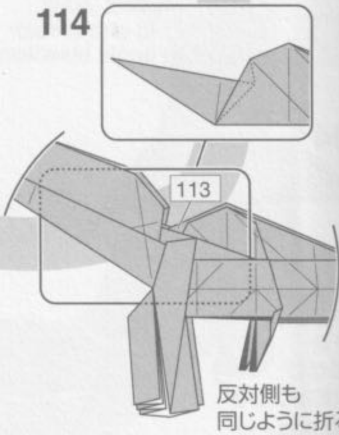
113



内側の
部分だけ
見た図
The inner
view.

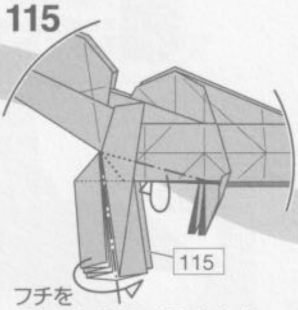
○を結ぶ線を
山折りにして
平らになるところで
引き寄せるように折る
Make the line
connecting the
circled points mountain
and pleat to inside.

114



反対側も
同じように折る
Repeat 113
behind.

115



フチを
それぞれ後ろへ折りたたむ
反対側も同じように折る
Fold the layers to behind.
Repeat behind.

116

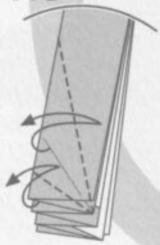


117



フチとフチを
合わせて
折り筋をつける
Fold edge to edge
and unfold.

118



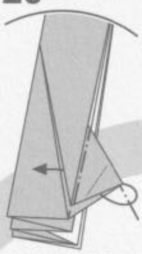
半分の角度で
折り筋をつける
Fold and unfold
at angle bisectors.

119



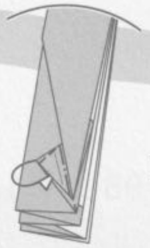
つけた折り筋と
○とカドを結ぶ線で
中わり折り
Inside reverse fold
at the circled point.

120



フチのところで
中わり折り
Inside reverse
fold along the
edges.

121



フチのところで
内側に折り込む
Inside reverse fold
along the edges.

122



残り3つのカドも
117-121と
同じように折る
Repeat
117-121
on the other
layers.

123

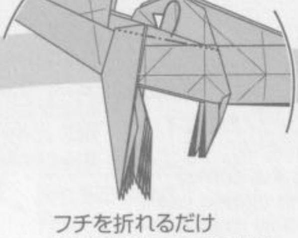


124



反対側も
117-122と
同じように折る
Repeat 117-122 behind.

125



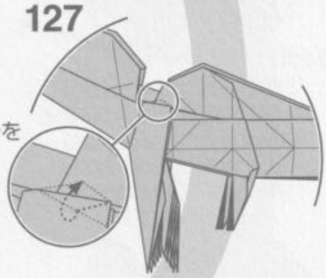
フチを折れるだけ
すぐ後ろのすき間へ折る
Fold the edge to inside.

126



フチを後ろへ
引き寄せる
ように折る
Fold the edge to inside.

127



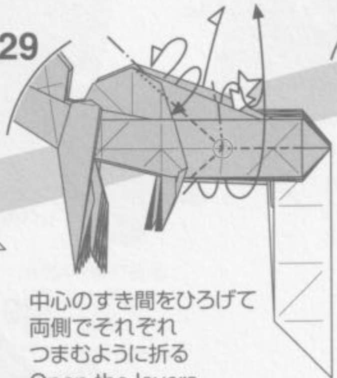
後ろのフチを
引き出す
Pull out the layer.

128



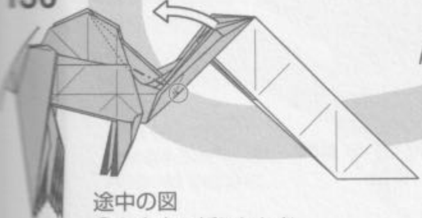
反対側も125-127と
同じように折る
Repeat 125-127 behind.

129



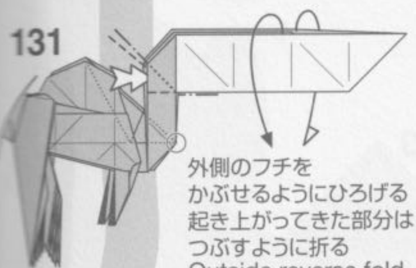
中心のすき間をひろげて
両側でそれぞれ
つまむように折る
Open the layers, pinch and fold the flap on both sides.

130



途中の図
○を支点に折りたたむ
In progress.
Flatten the model.

131



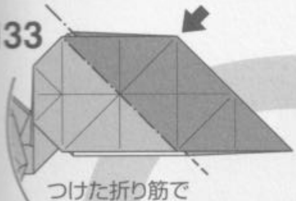
外側のフチを
かぶせるようにひろげる
起き上がってきた部分は
つぶすように折る
Outside reverse fold and squash.

132



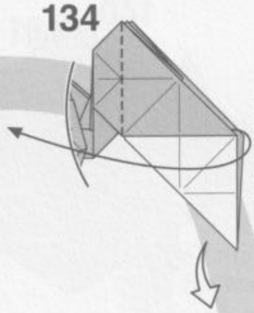
フチを折り筋に合わせて
折り筋をつける
Fold the edge to the crease and unfold.

133



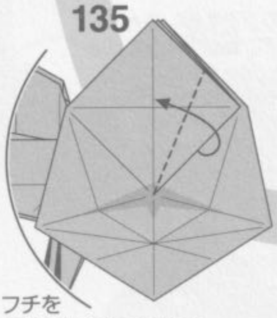
つけた折り筋で
沈め折り(Open sink)
Open sink along the creases.

134



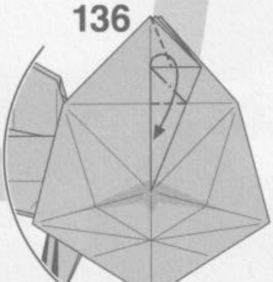
手前の1枚を
ひろげるように折る
平らにはならない
Open the layer.
The model will not lie flat.

135



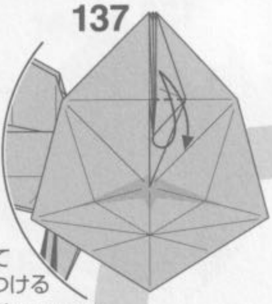
フチを
折り筋に合わせて折る
Fold the edge to the crease.

136



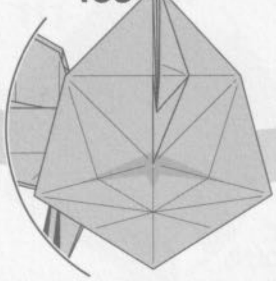
カドをつまむように折る
Pinch the corner and fold it down.

137



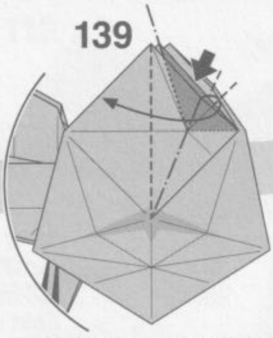
カドを
上へ折って
折り筋をつける
Fold up the corner and unfold.

138



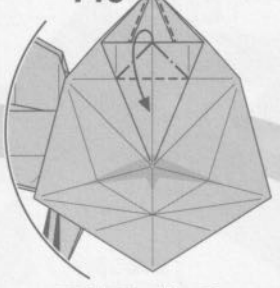
135の形まで戻す
Unfold to 135.

139



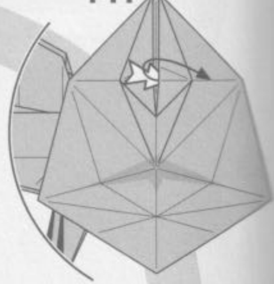
中心のフチを押し込んで
ひろげてつぶすように折る
Push down the
darkened area and
flatten the model.

140



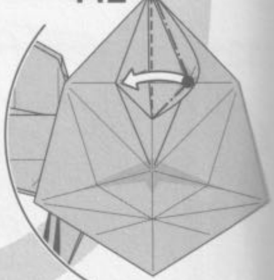
フチを下へ折って
つぶすように折る
Petal fold.

141



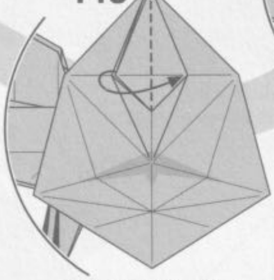
フチをかるくひろげる
Open the layer.

142



●の部分を引き出して
折りたたむ
Pull out the dotted
point.

143



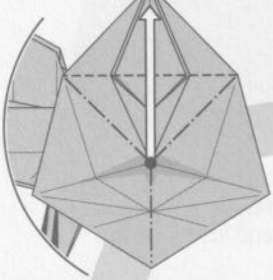
カドを反対側へ折る
Fold the flap
to the other side.

144



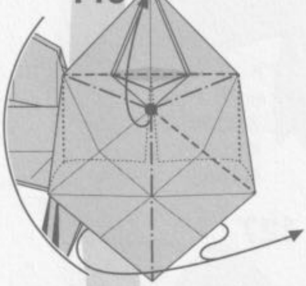
反対側も141-143と
同じように折る
Repeat 141-143
on the other side.

145



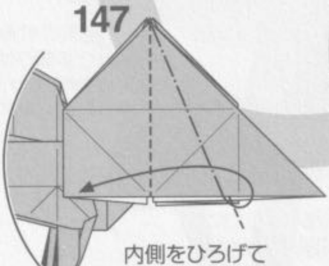
●の凹んだ部分を引き出す
Pull out the dotted point.

146



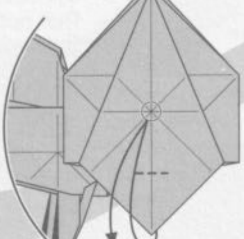
●をカドに合わせながら
中心線をつまむように折る
Pinch the center line
of the top layer and
lay down the layers.

147



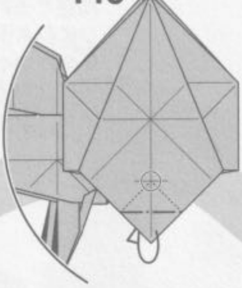
内側をひろげて
つぶすように折る
Open the corner
and squash.

148



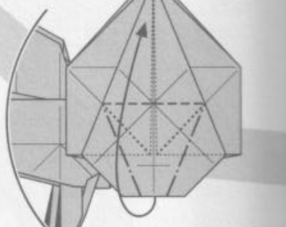
カドを○に合わせて
印をつける
Fold the corner
to the circled point
but only mark
at the center.

149



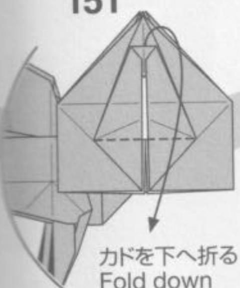
カドをつけた
印に合わせて
後ろへ折る
Mountain fold
the corner to
the circled point.

150



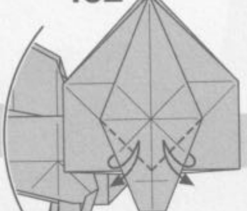
ついている折り筋で
上へひろげて
つぶすように折る
Fold up the edge
along the crease
and squash.

151



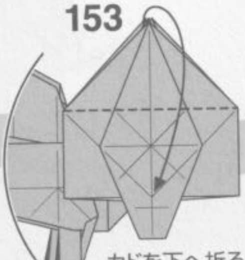
カドを下へ折る
Fold down
the corner.

152



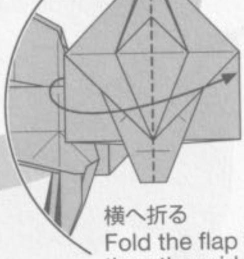
後ろのフチのところで
折り筋をつける
Fold and unfold
along the
hidden edges.

153



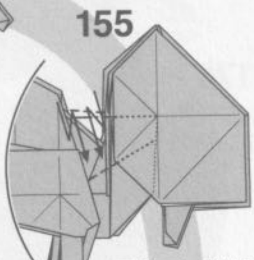
カドを下へ折る
Fold down
the flap.

154



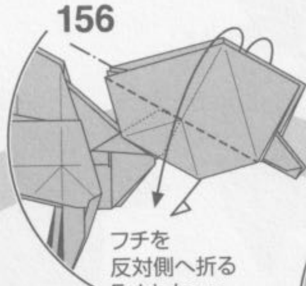
横へ折る
Fold the flap to
the other side.

155



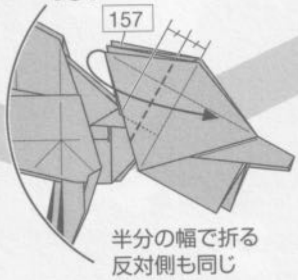
両側でかぶせる
ように段折り
Pleat on
both sides.

156



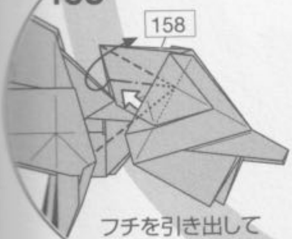
フチを
反対側へ折る
Fold down
the flaps.

157



半分の幅で折る
反対側も同じ
ように折る
Fold the corner
as shown.
Repeat behind.

158



フチを引き出して
折りたたむ
反対側も同じように
折る
Pull out and
swivel the layer.
Repeat behind.

159



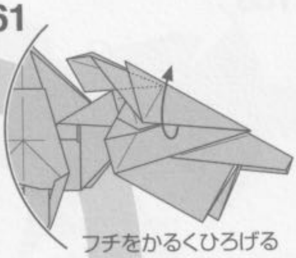
中心のすき間で
反対側へ折る
Fold down
the layers .

160



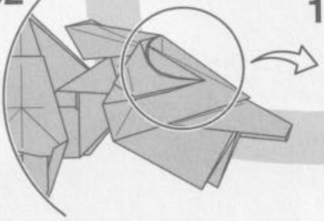
カドを下へずらす
Swivel the corner
down.

161

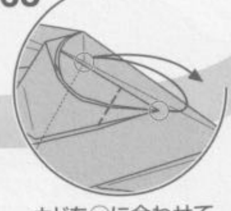


フチをかるくひろげる
Open the layer.

162

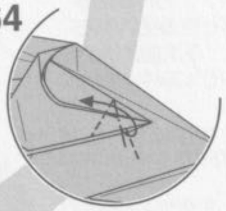


163



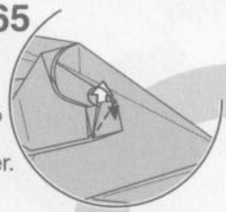
カドを◯に合わせて
折り筋をつける
Fold the corner to
the circled point
and unfold.

164

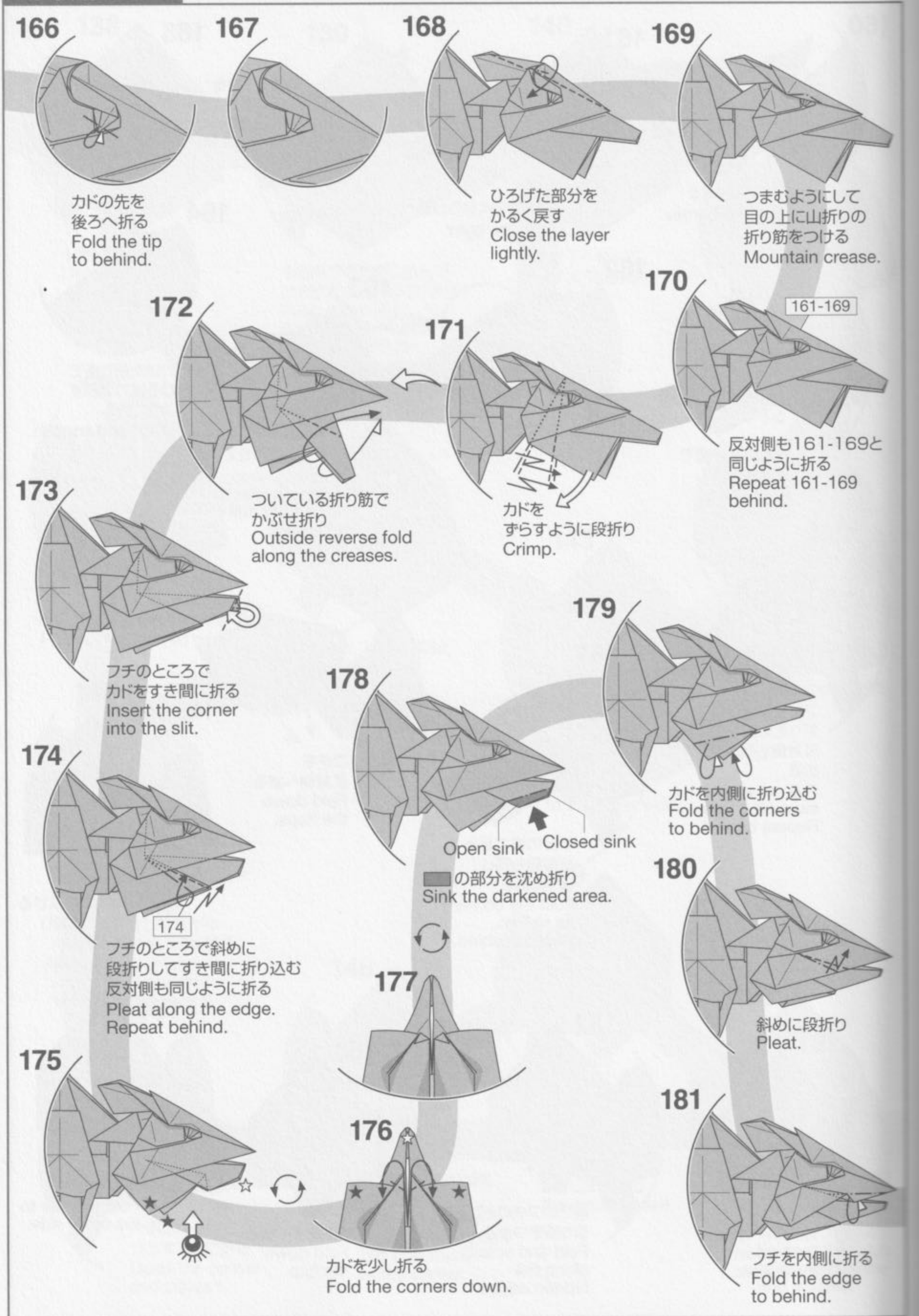


つけた折り筋で
ひろげてつぶす
ように折る
Open and squash.

165



外側の1枚を
はがすように折る
Pull out the
outermost layer.


166
カドの先を
後ろへ折る
Fold the tip
to behind.
167
168
ひろげた部分を
かるく戻す
Close the layer
lightly.
169
つまむようにして
目の上に山折りの
折り筋をつける
Mountain crease.
170
161-169
反対側も161-169と
同じように折る
Repeat 161-169
behind.
171
カドを
ずらすように段折り
Crimp.
172
ついている折り筋で
かぶせ折り
Outside reverse fold
along the creases.
173
フチのところで
カドをすき間に折る
Insert the corner
into the slit.
174
174
フチのところで斜めに
段折りしてすき間に折り込む
反対側も同じように折る
Pleat along the edge.
Repeat behind.
175
176
カドを少し折る
Fold the corners down.
177
178
Open sink
Closed sink
の部分を沈め折り
Sink the darkened area.
179
カドを内側に折り込む
Fold the corners
to behind.
180
斜めに段折り
Pleat.
181
フチを内側に折る
Fold the edge
to behind.

182



後ろへ引き寄せるように段折り
Swivel inside.

183



反対側も180-182と同じように折る
Repeat 180-182 behind.

184



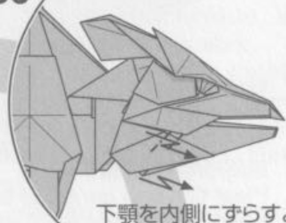
上下からつまむようにして形を整える
Pinch and shape the upper jaw.

185



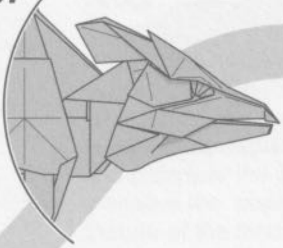
カドの先を両側でかぶせるように段折り
Crimp.

186



下顎を内側にずらすように段折りして位置を調整する
Pleat on both sides and shape the lower jaw.

187

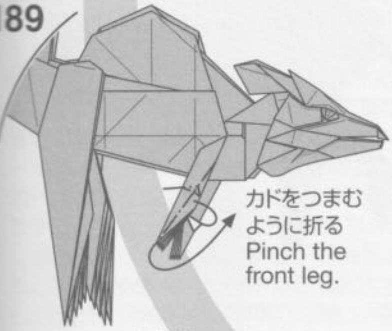


188



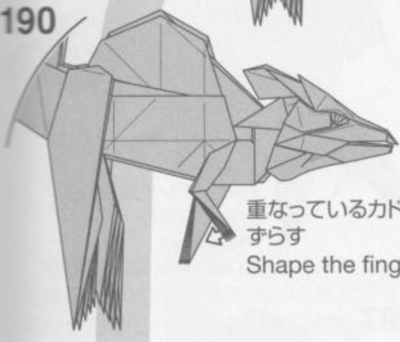
斜めに折る
Fold the front leg.

189



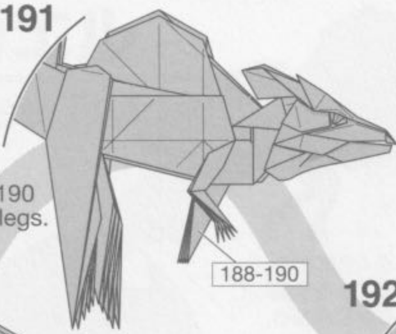
カドをつまむように折る
Pinch the front leg.

190



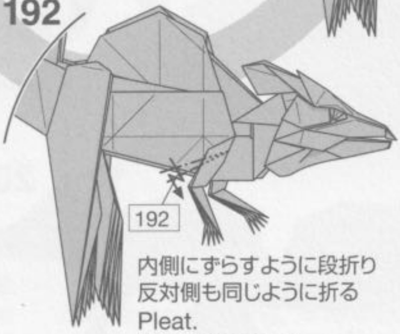
重なっているカドをずらす
Shape the fingers.

191



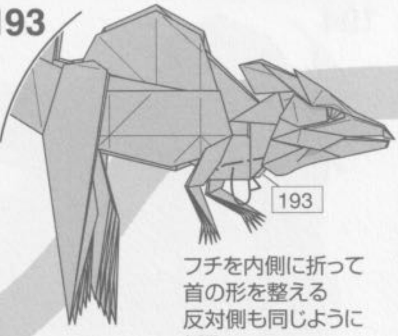
反対側も188-190と同じように折る
Repeat 188-190 on the other legs.

192



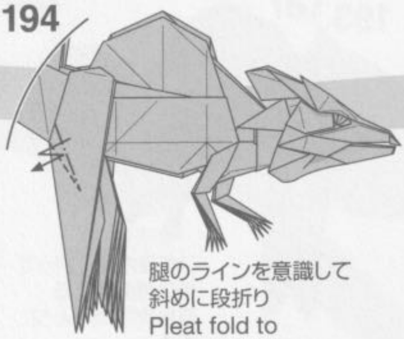
内側にずらすように段折り
反対側も同じように折る
Pleat.
Repeat behind.

193



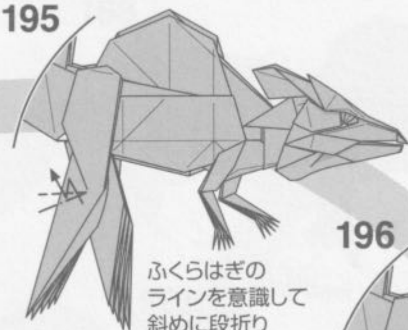
フチを内側に折って首の形を整える
反対側も同じように折る
Fold the edges to inside and shape the neck.
Repeat behind.

194



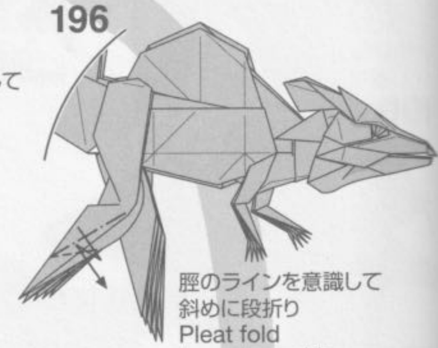
腿のラインを意識して
斜めに段折り
Pleat fold to
make a thigh.

195



ふくらはぎの
ラインを意識して
斜めに段折り
Pleat fold to
make a calf.

196



脛のラインを意識して
斜めに段折り
Pleat fold
to make a shin.

197



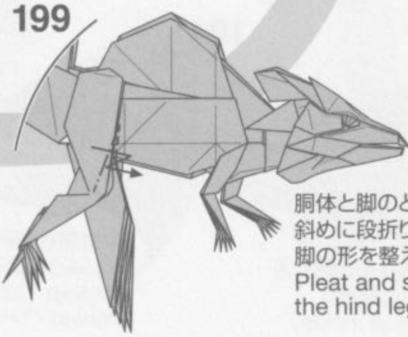
指のカドを全て
つまむように折って
形を整える
Pinch the toes
and shape.

198



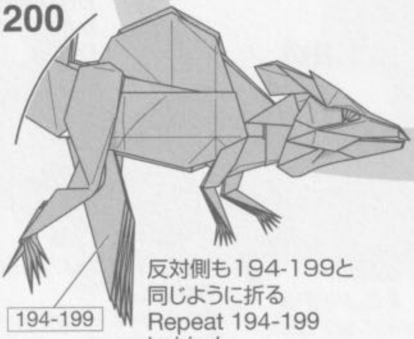
一番端のカドを
横に出すように折る
Shape the toes.

199



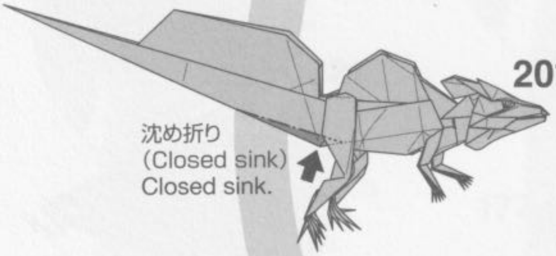
胴体と脚のところで
斜めに段折りして
脚の形を整える
Pleat and shape
the hind leg.

200



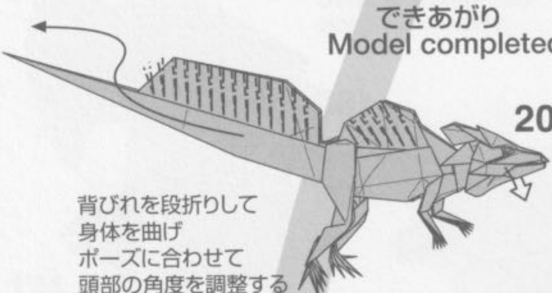
反対側も194-199と
同じように折る
Repeat 194-199
behind.

201



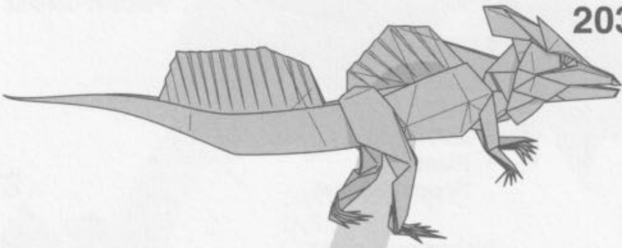
沈め折り
(Closed sink)
Closed sink.

202



背びれを段折りして
身体を曲げ
ポーズに合わせて
頭部の角度を調整する
Pleat fins and bend the body.
Shape the angle of the head.

203

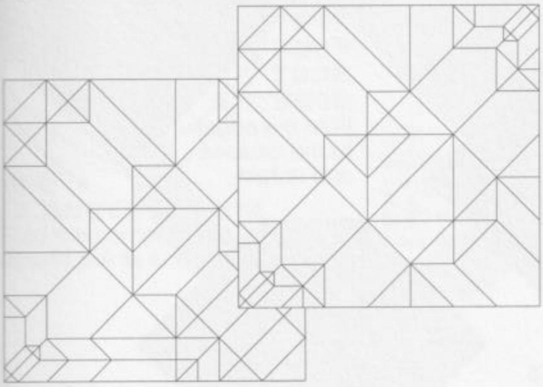


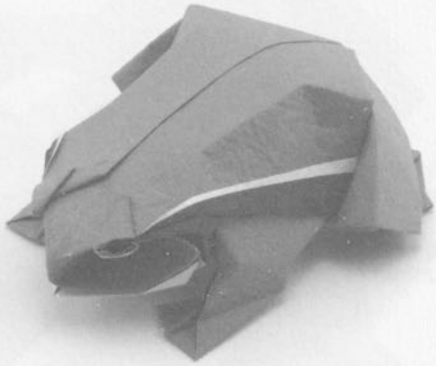
できあがり
Model completed.

ヒキガエル

Japanese Toad

Created in 2022





推奨用紙 25cm

本書では唯一の「重ね折り」と呼んでいる、複数の用紙を重ねたまま折る手法を用いた作品です。折ったものを組み合わせる一般的な複合では難しい表現も可能な手法として期待しています。

この手法を用いるようになってから、対象をどのように折り紙作品としてデザインするかの選択肢が増えたのですが、あるとき偶然ヒキガエルの写真を見たときに、体の側面に入っている白と黒のライン状の模様がこの手法で表現できるのではと思いつき、創作に挑みました。

始めはより少ない等分数から、冬眠中のような丸まったポーズの試作が出来上がったのですが、更に等分数を増やすことで脚とお腹の面の表現を強化し、完成しました。

最終的なデザインの特徴として「瞳孔」の表現が目立つと思いますが、これは創作のきっかけとなった模様の折り出しを試行錯誤する中で現れた嬉しい偶然でした。

重ね折りには単純に紙の厚さが部分的に倍になるという難点があるので、あまり厚い用紙を使うことはおすすめしませんが、和紙などのテクスチャのある紙でデコボコとした皮膚を表現すると、より生き生きとした作品に仕上がるでしょう。

This is the only work in this book that uses what we call "layered folding," a technique of folding multiple sheets of paper in layers. We expect this technique to make it possible to express images that are hard to achieve with an ordinary composite model.

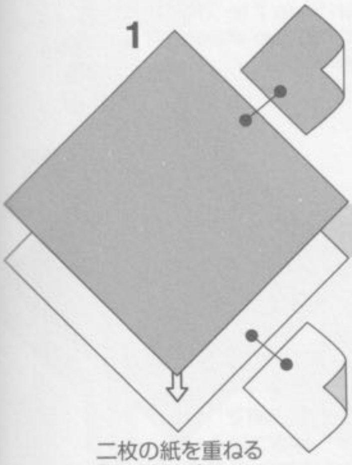
The layered folding method gave me choices in ways of designing models given a certain motif. One day, when I happened to see a photo of a toad, I thought that the black and white lines on the sides of its body could be expressed using this technique, and I decided on the challenge of creating this work.

I started with fewer equal divisions of a sheet and made a prototype of a curled-up, hibernating pose. By increasing the number of divisions, I was able to enhance the expression of the legs and belly surfaces and complete the design.

I believe the “pupils” appear to be the most prominent feature of the model, but this was given coincidentally when I was folding out the pattern on the sides.

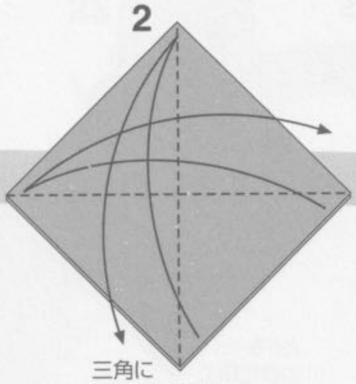
Since stacked folds have the drawback of simply doubling the thickness of the paper in parts, I do not recommend using very thick paper, but using textured paper such as washi to express the bumpy skin will make the model more lively.

1



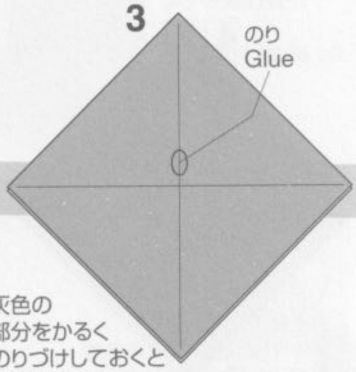
二枚の紙を重ねる
Put two sheets together.

2



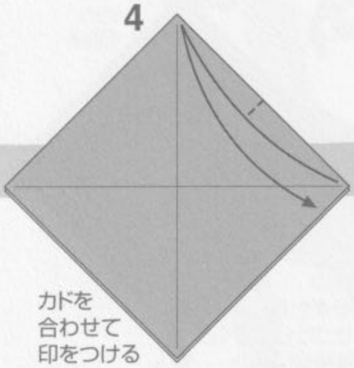
三角に
折り筋をつける
Fold in halves and unfold.

3



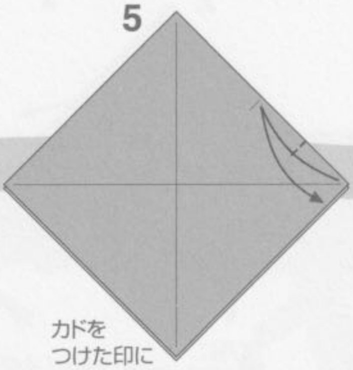
灰色の
部分をかるく
のりづけしておくと
折りやすい
It is easier to fold if you glue two sheets together at the marked point.

4



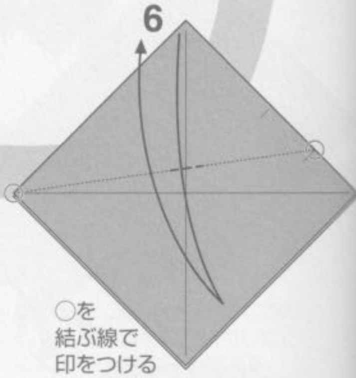
カドを
合わせて
印をつける
Fold corner to corner,
but only mark on
the edge. Unfold.

5



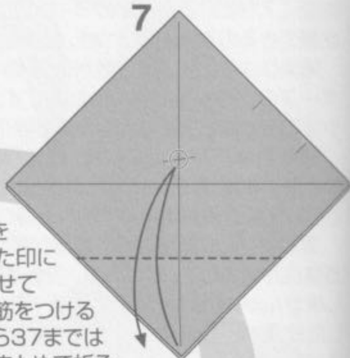
カドを
つけた印に
合わせて印をつける
Fold the corner to
the mark and unfold.

6



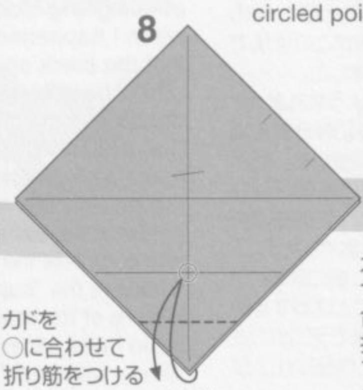
○を
結ぶ線で
印をつける
Mark at the intersection
of the line connecting
the circled points.

7



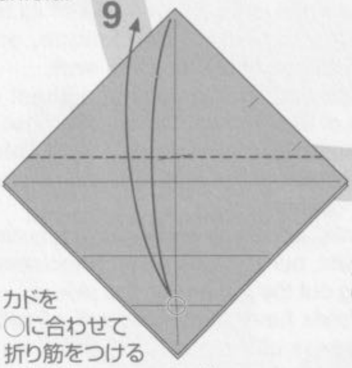
カドを
つけた印に
合わせて
折り筋をつける
7から37までは
2枚まとめて折る
Fold the corner to the
circled point and unfold.
From Step 7 to 37,
Fold the two sheets
together.

8



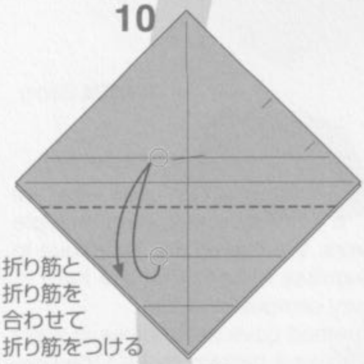
カドを
○に合わせて
折り筋をつける
Fold the corner to the
circled point and unfold.

9



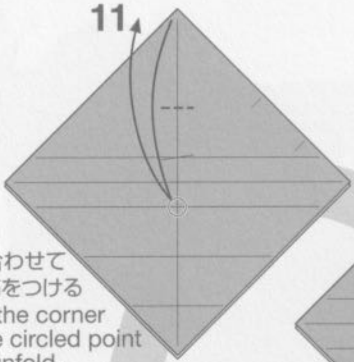
カドを
○に合わせて
折り筋をつける
Fold the corner to the
circled point and unfold.

10



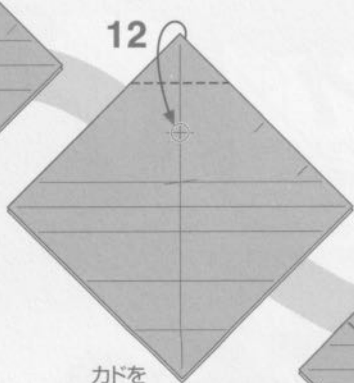
折り筋と
折り筋を
合わせて
折り筋をつける
Fold crease to crease
and unfold.

11



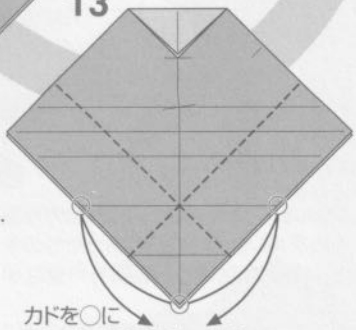
カドを
○に合わせて
折り筋をつける
Fold the corner
to the circled point
and unfold.

12



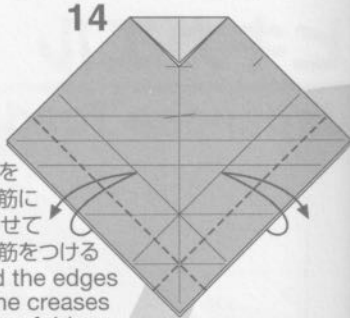
カドを
○に合わせて折る
Fold the corner
to the circled point.

13

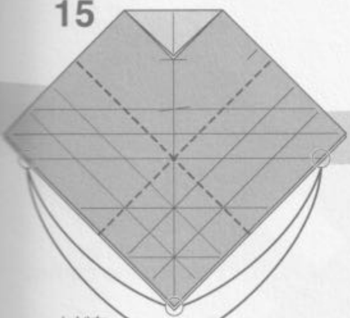


カドを○に
合わせて折り筋をつける
Fold the corner to the
circled point and unfold.

14

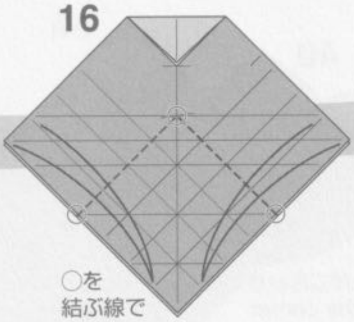


フチを
折り筋に
合わせて
折り筋をつける
Fold the edges
to the creases
and unfold.



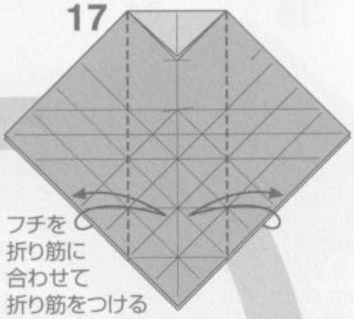
15

カドを
○に合わせて折り筋をつける
Fold the corner to the circled points and unfold.



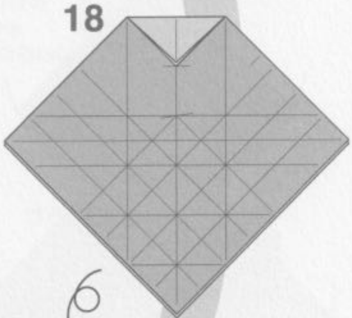
16

○を
結ぶ線で
折り筋をつける
Fold the lines connecting the circled points and unfold

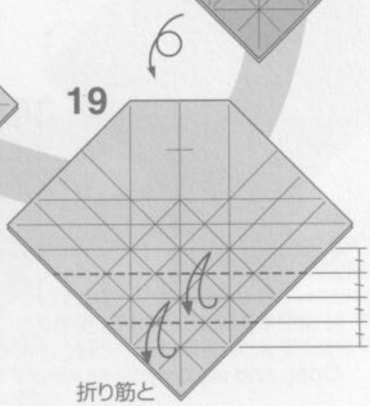


17

フチを
折り筋に
合わせて
折り筋をつける
Fold the edges to the creases and unfold.

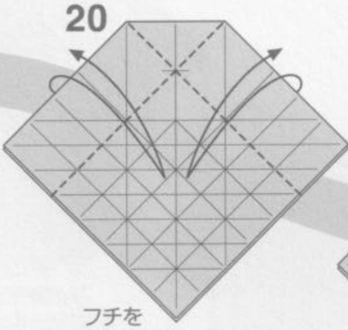


18



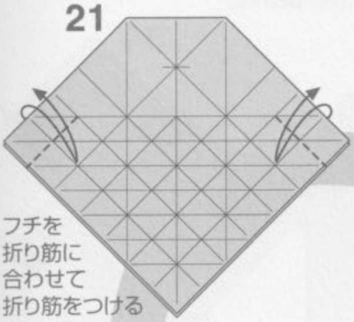
19

折り筋と
折り筋を合わせて
折り筋をつける
Fold and unfold at half of the width.



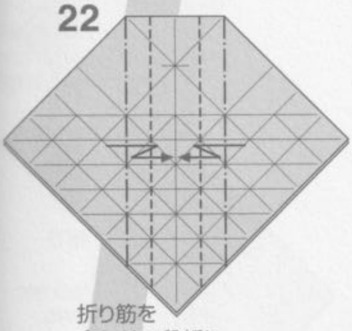
20

フチを
折り筋に合わせて
折り筋をつける
Fold the edges to the creases and unfold.



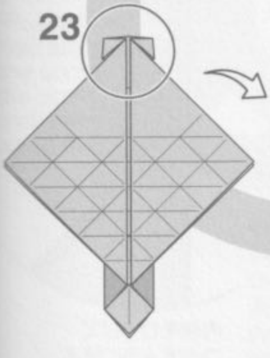
21

フチを
折り筋に
合わせて
折り筋をつける
Fold the edges to the creases and unfold.

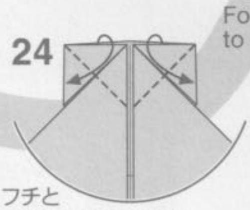


22

折り筋を
合わせて段折り
Pleat.

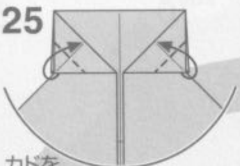


23



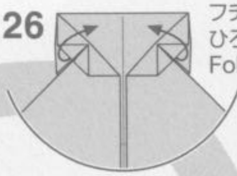
24

フチと
フチを合わせて折る
Fold edge to edge.



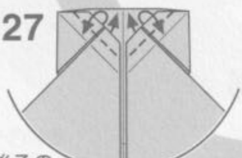
25

カドを
フチに合わせて折る
Fold the corners to the edges.



26

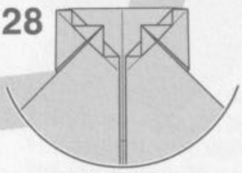
フチを反対側へ
ひろげる
Fold the flaps up.



27

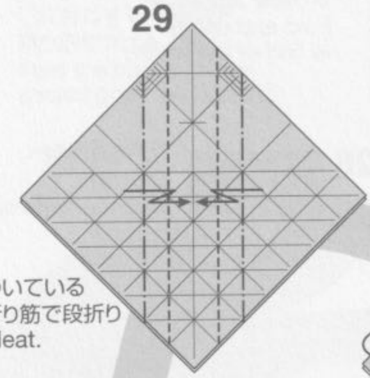
後ろの
カドを出しながらフチを
折り筋に合わせて折る
Fold edges to the creases and swivel the corner.

28



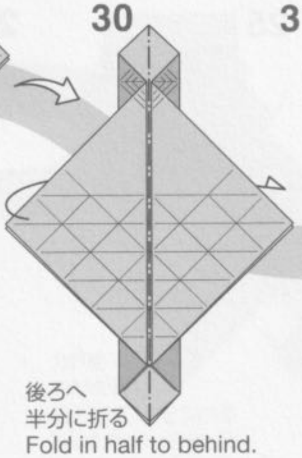
全部ひろげる
Unfold everything.

29



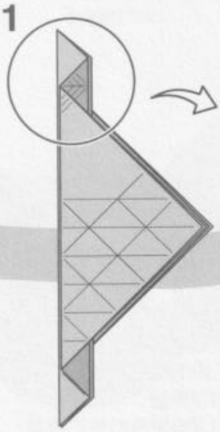
ついている
折り筋で段折り
Pleat.

30

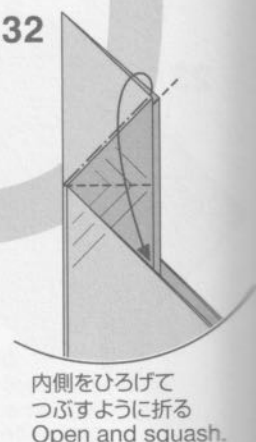


後ろへ
半分に折る
Fold in half to behind.

31

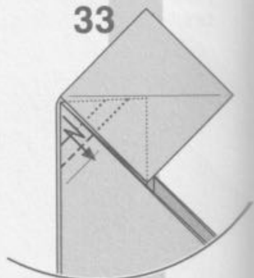


32



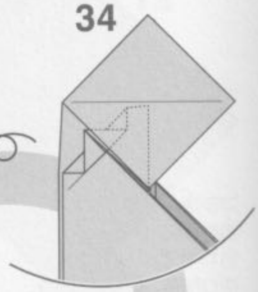
内側をひろげて
つぶすように折る
Open and squash.

33

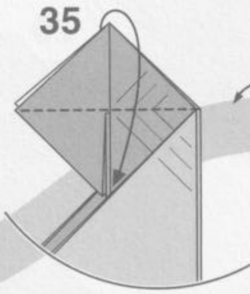


ついている折り筋で
カドを段折り
Pleat fold the corner
using the creases.

34

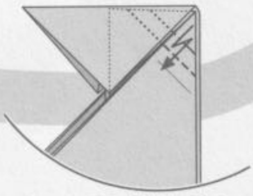


35



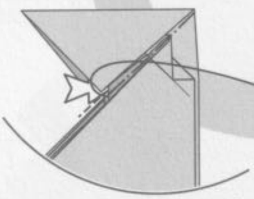
カドを下へ折る
Fold down
the corner.

36



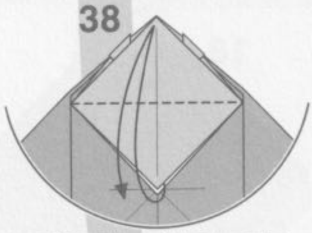
ついている折り筋で
カドを段折り
Pleat fold the corner
using the creases.

37



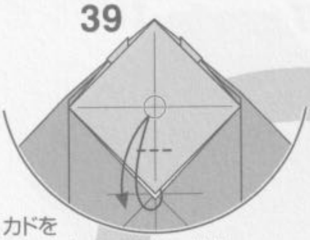
中心のすき間をひろげて
つぶすように折る
Open and squash.

38



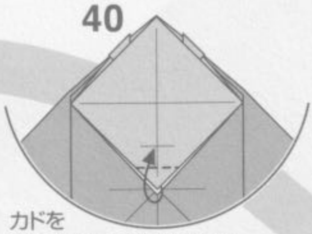
手前の1枚をカドのところで
折って折り筋をつける
Fold up only one layer
and unfold.

39



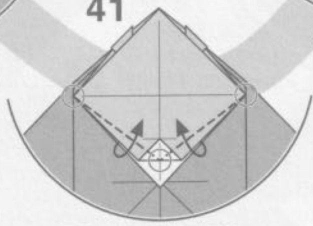
カドを
○に合わせて印をつける
Fold the corner to the
circled point and unfold,
but only mark at the center.

40



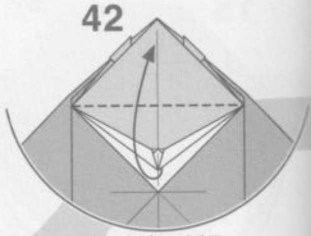
カドを
つけた印に合わせて折る
Fold the corner
to the crease.

41



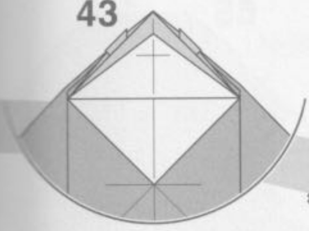
○を結ぶ線で折る
Fold along the
line connecting
the circled points.

42

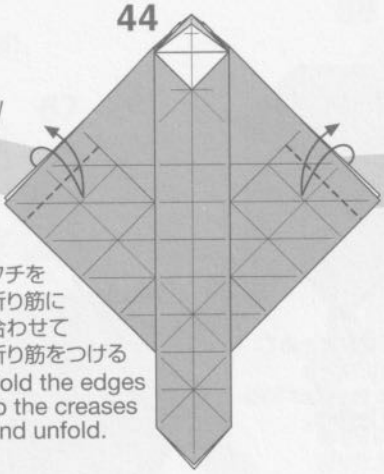


カドを上へ折る
Fold up the corner.

43

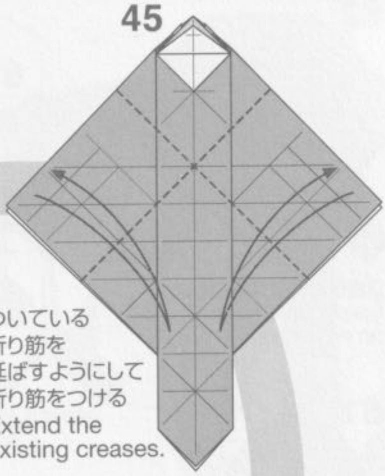


44



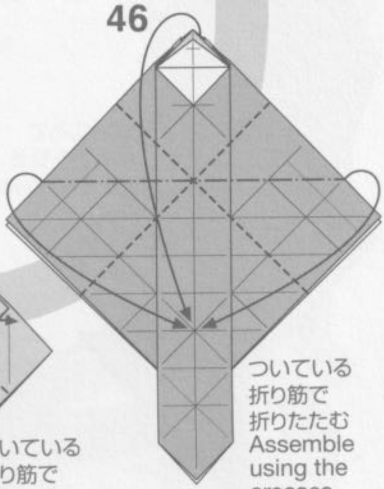
フチを
折り筋に
合わせて
折り筋をつける
Fold the edges
to the creases
and unfold.

45



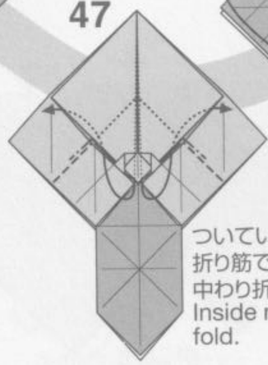
ついている
折り筋を
延ばすようにして
折り筋をつける
Extend the
existing creases.

46



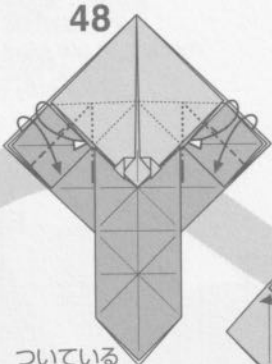
ついている
折り筋で
折りたたむ
Assemble
using the
creases.

47



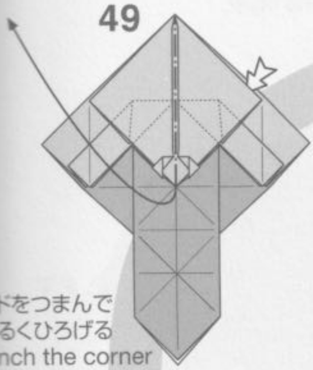
ついている
折り筋で
中わり折り
Inside reverse
fold.

48



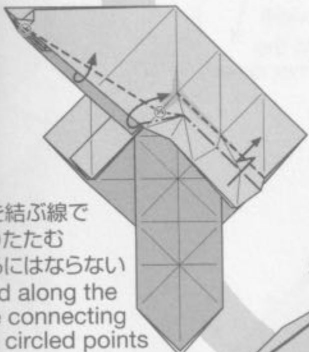
ついている
折り筋を使って
内側に引き寄せる
ように折る
Fold the top layer
edge to edge.

49



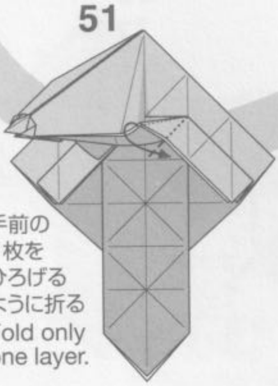
カドをつまんで
かるくひろげる
Pinch the corner
and open the layers
lightly.

50



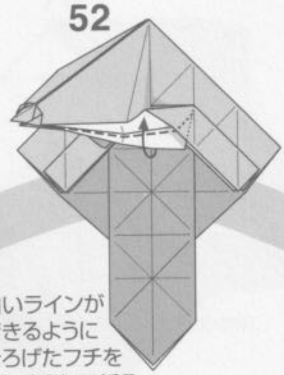
○を結ぶ線で
折りたたむ
平らにはならない
Fold along the
line connecting
the circled points
and assemble
along the creases.

51



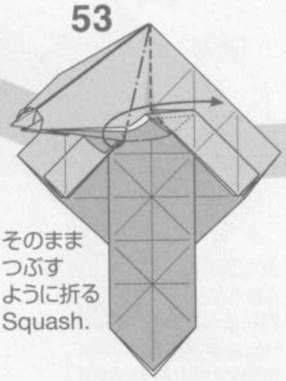
手前の
1枚を
ひろげる
ように折る
Fold only
one layer.

52



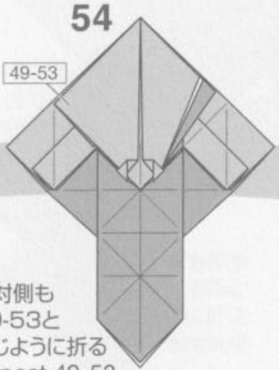
白いラインが
できるように
ひろげたフチを
少しずらして折る
Fold the layer up
again, but along the
line slightly lower than
the existing one.

53



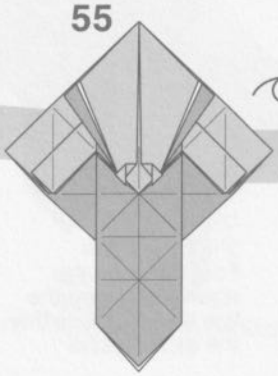
そのまま
つぶす
ように折る
Squash.

54

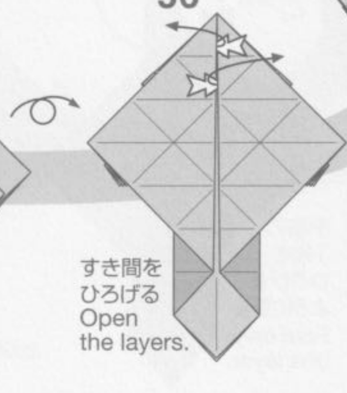


反対側も
49-53と
同じように折る
Repeat 49-53
on the other side.

55

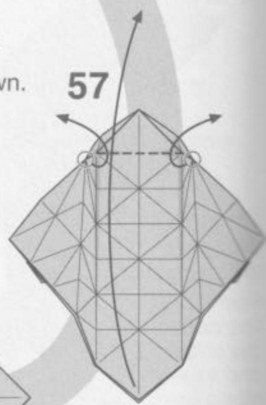


56



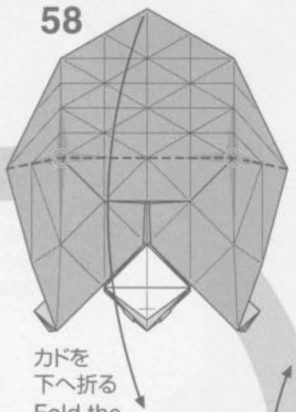
すき間を
ひろげる
Open
the layers.

57



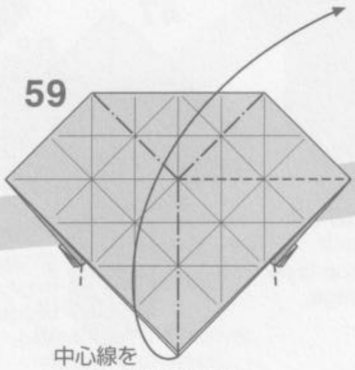
カドを上へ折って
つぶすように折る
Fold up the corner
and squash using
the creases.

58



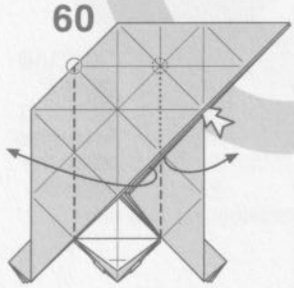
カドを
下へ折る
Fold the
corner down.

59



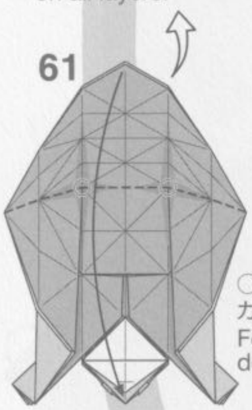
中心線を
つまんで折りたたむ
Pinch and raise the
corner.

60



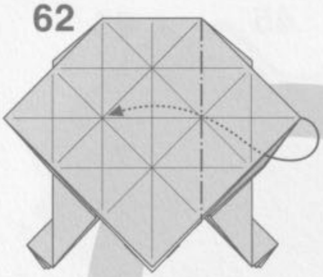
ついている折り筋で
内側をひろげる
ように折る
Open the layers
using the creases.

61



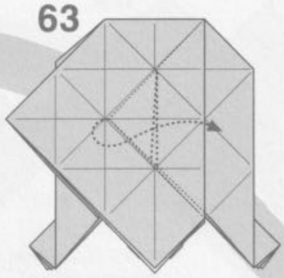
○のところで
カドを下へ折る
Fold the corner
down.

62



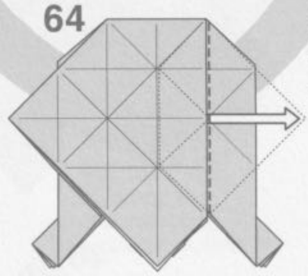
2枚まとめて中わり折り
Inside reverse fold
on all layers.

63



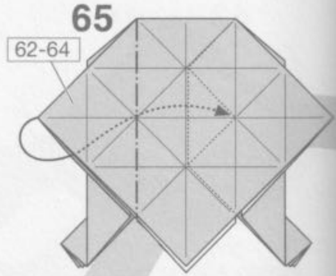
内側で2枚まとめて
中わり折り
Inside reverse fold
on all layers.

64



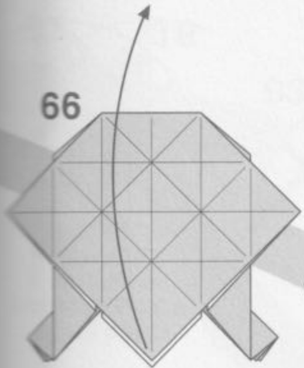
外側の1枚を62の形に戻す
Unfold only one layer.

65



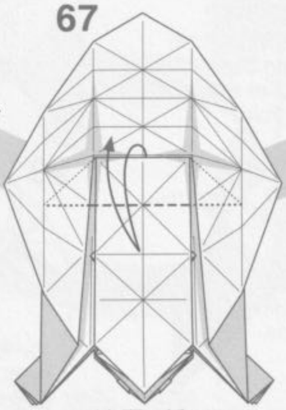
反対側も62-64と
同じように折る
Repeat 62-64
on the other side.

66



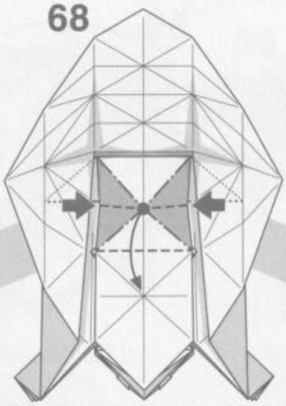
カドをかるくひろげる
Open the layer.

67



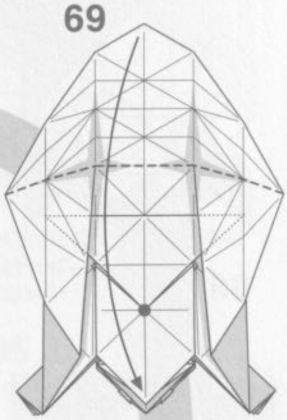
フチを下へ折って
折り筋をつける
Fold the flap down
and unfold.

68



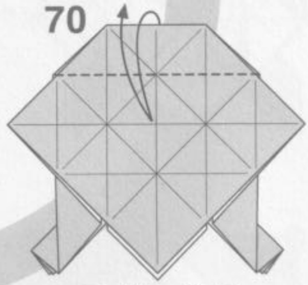
左右から押し込みながら
●を引き出して
折りたたむ
Push in the sides
and pull down
the dotted point.

69



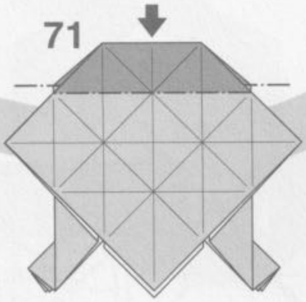
閉じるように折る
Close the layer.

70



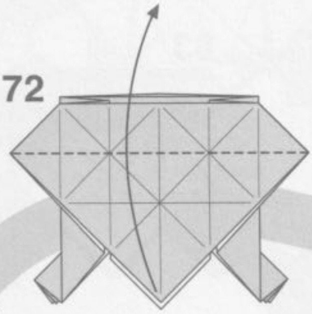
折り筋をつけ直す
Fold and unfold
along the crease.

71



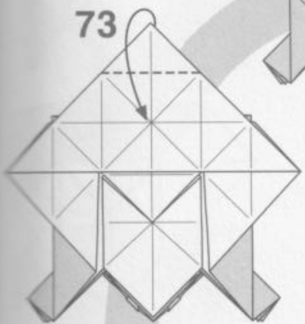
沈め折り(Open sink)
Open sink along
the creases.

72



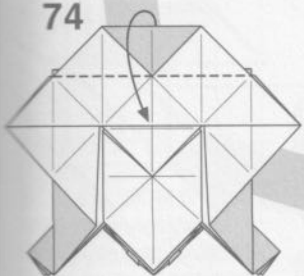
カドのところで
上へ折る
Fold the layer up.

73



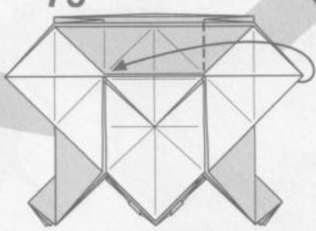
カドを折り筋に
合わせて折る
Fold the corner
to the crease.

74



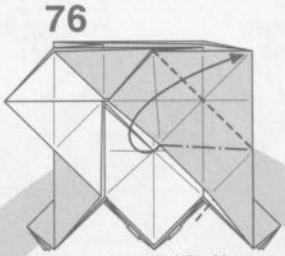
ついている折り筋で
下へ折る
Fold down along
the crease.

75



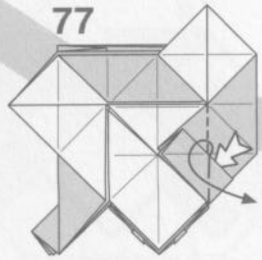
カドを横へ折る
Fold the flap
to the other side.

76

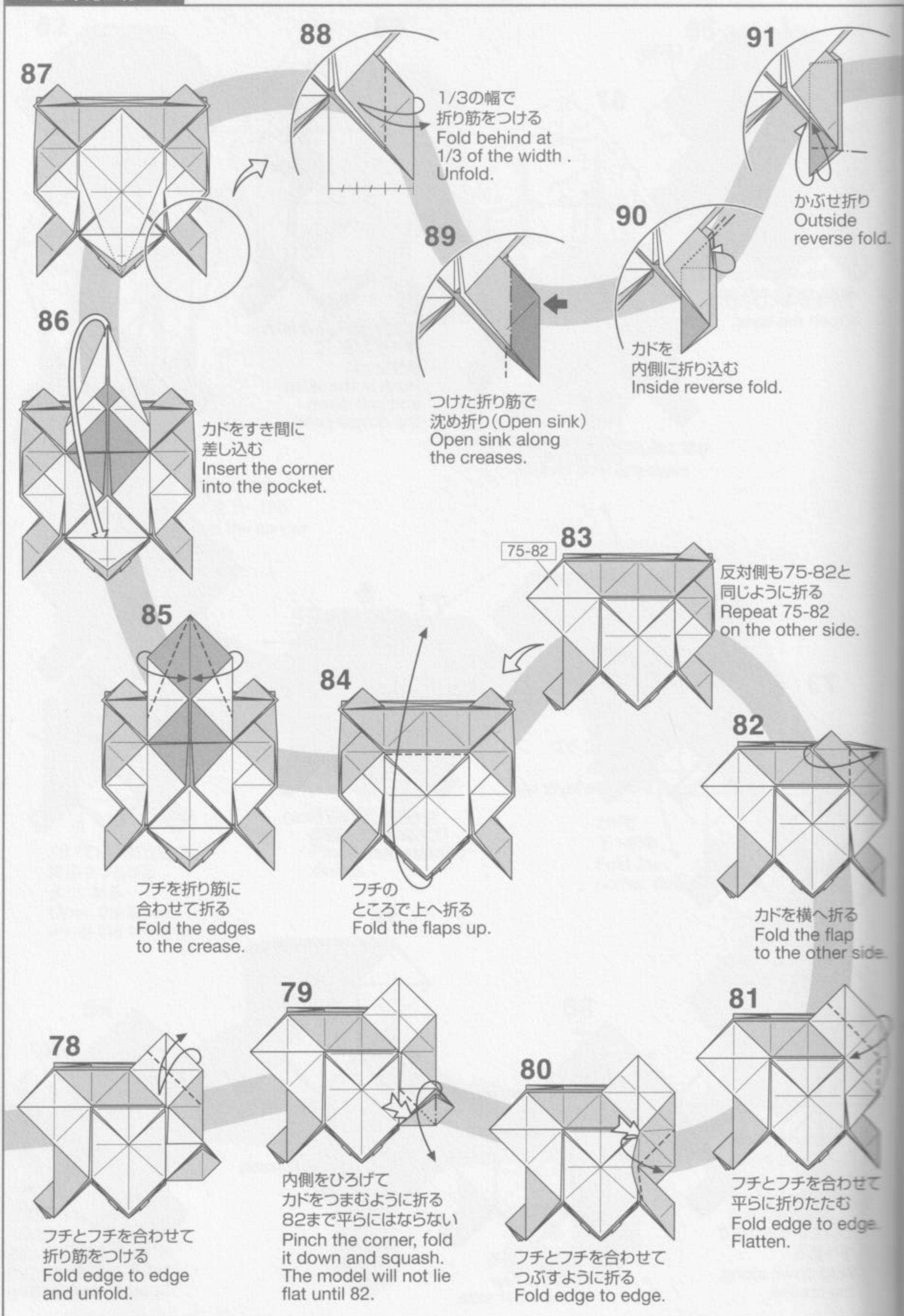


ついている折り筋で
ひろげてつぶす
ように折る
Open and squash.

77



内側をひろげて
つぶすように折る
Open and squash.

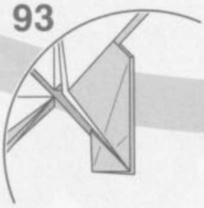

78
フチとフチを合わせて
折り筋をつける
Fold edge to edge
and unfold.
79
内側をひろげて
カドをつまむように折る
82まで平らにはならない
Pinch the corner, fold
it down and squash.
The model will not lie
flat until 82.
80
フチとフチを合わせて
つぶすように折る
Fold edge to edge.
81
フチとフチを合わせて
平らに折りたたむ
Fold edge to edge.
Flatten.
82
カドを横へ折る
Fold the flap
to the other side.
83
75-82
反対側も75-82と
同じように折る
Repeat 75-82
on the other side.
84
フチの
ところで上へ折る
Fold the flaps up.
85
フチを折り筋に
合わせて折る
Fold the edges
to the crease.
86
カドをすき間に
差し込む
Insert the corner
into the pocket.
87
88
1/3の幅で
折り筋をつける
Fold behind at
1/3 of the width .
Unfold.
89
つけた折り筋で
沈め折り(Open sink)
Open sink along
the creases.
90
カドを
内側に折り込む
Inside reverse fold.
91
かぶせ折り
Outside
reverse fold.

92

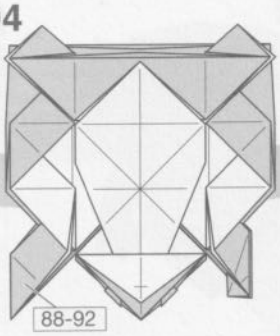


○を結ぶ線で
折り筋をつける
Fold the lines
connecting the
circled points.

93

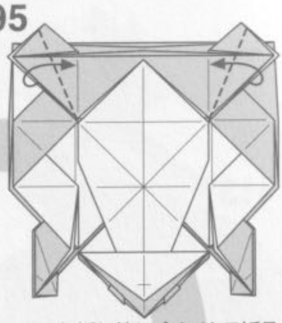


94



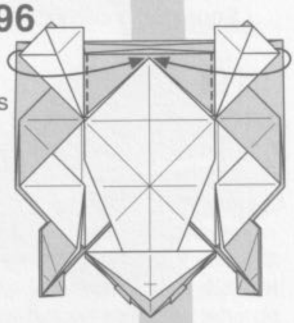
反対側も88-92と
同じように折る
Repeat 88-92
on the other side.

95



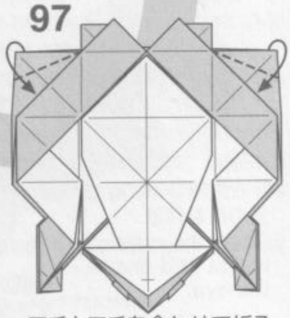
フチを折り筋に合わせて折る
Fold the edges to the
creases.

96



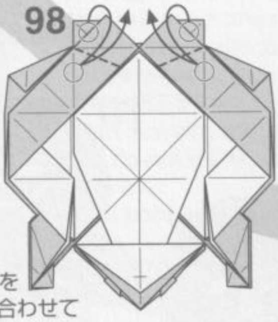
反対側へ折る
Fold the flaps
to the other
side.

97



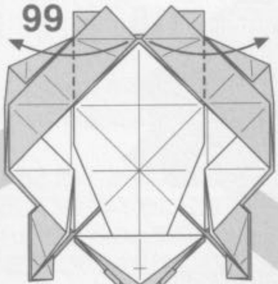
フチとフチを合わせて折る
Fold edge to edge.

98



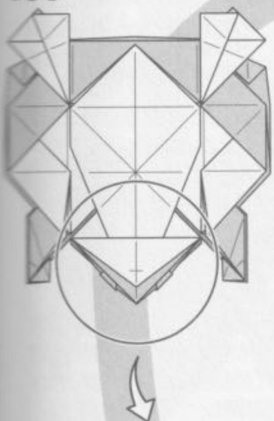
○のフチを
折り筋に合わせて
折り筋をつける
Fold the circled edges
to the creases and unfold.

99



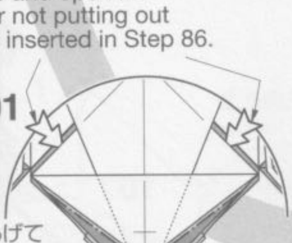
反対側へ折る
Fold the flaps
to the other side.

100



86で差し込んだカドが
抜けないようにしながら
このすき間から指を
差し込んでひろげるとよい
Put your finger in the
pockets and open it.
Care for not putting out
the flap inserted in Step 86.

101



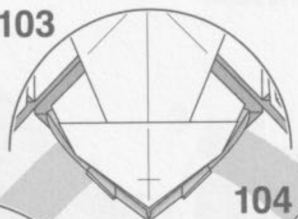
内側をひろげて
フチのところで
押し込むように折る
86で差し込んだカドも
まとめて折るとロックされる
Open inner layers and
fold as shown. The flap
inserted in Step 86
should be folded together,
to lock the model.

102

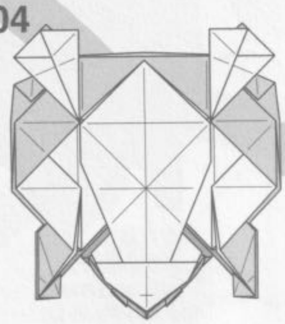


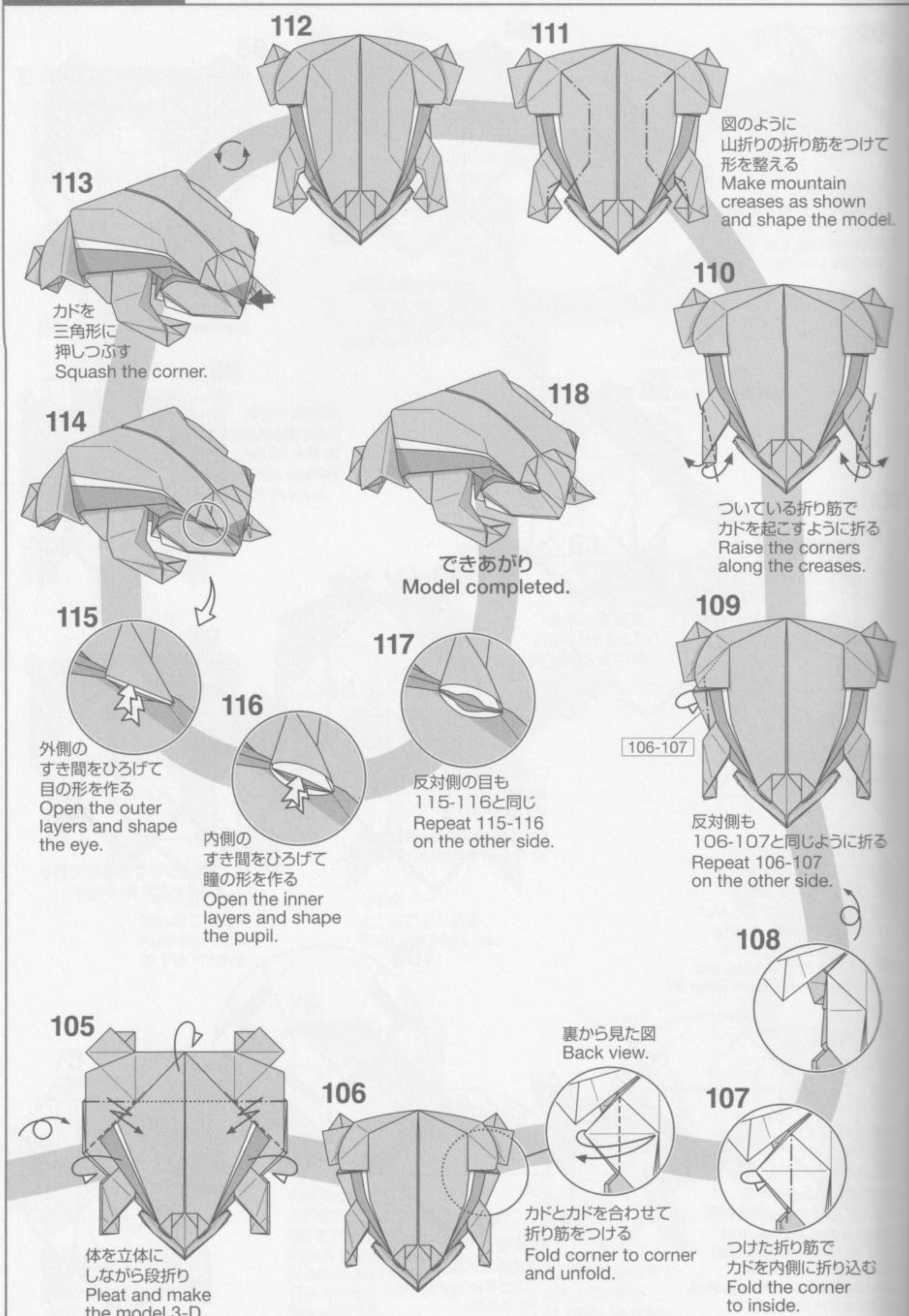
カドを
内側に折り込む
Fold the corners
to inside.

103



104

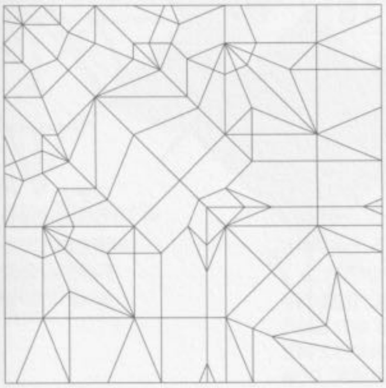



105
体を立体にしながら段折り
Pleat and make the model 3-D.
106
裏から見た図
Back view.
カドとカドを合わせて折り筋をつける
Fold corner to corner and unfold.
107
つけた折り筋でカドを内側に折り込む
Fold the corner to inside.
108
109
106-107
反対側も106-107と同じように折る
Repeat 106-107 on the other side.
110
ついている折り筋でカドを起こすように折る
Raise the corners along the creases.
111
図のように山折りの折り筋をつけて形を整える
Make mountain creases as shown and shape the model.
112
113
カドを三角形に押しつぶす
Squash the corner.
114
115
外側のすき間をひろげて目の形を作る
Open the outer layers and shape the eye.
116
内側のすき間をひろげて瞳の形を作る
Open the inner layers and shape the pupil.
117
反対側の目も115-116と同じ
Repeat 115-116 on the other side.
118
できあがり
Model completed.

狐の嫁入り - 花嫁 -

Fox wedding -Bride-

Created in 2021





推奨用紙 40cm

「狐の嫁入り」をモチーフとした折り紙作品は以前から何度も挑戦していましたが、納得のいく作品にはならずお蔵入りとなっていました。

2021年に改めて挑戦しようと思い、まずはイラストを描いてイメージを固めました。そして試作ができた段階でSNSに写真を投稿したところ、これが予想外の大反響となりました。構造やデザインから、折り紙マニアには受ける作品であっても、折り紙をやらない多くの人から反響がある作品だとは考えておらず、驚いたのを覚えています。

おそらく87-90の工程が最も難度が高いと思われますが、実のところこの手順は飛ばすことが可能です。シルエットが若干変わりますが、もしどうしても難しいという場合はそのまま91の手順から進めてしまってください。

本書では本作から始まった「狐の嫁入りシリーズ」である花嫁、花婿、お付きの狐2種を掲載しており、全て揃えると花嫁行列を作ることができます。それなりに大変な作業にはなると思いますが、是非挑戦してみてください。

以下は参考までに、作例で使用した用紙のサイズになります。

花嫁：40×40cm、花婿：40×40cm、
提灯持ち：27×27cm(提灯：12×9cm)、
傘持ち：30×30cm(傘：[内側、外側]：18×18cm、[頭]：3×3cm)

I had tried designing a "Fox Wedding" model in the past, but I could not succeed in making a satisfactory one.

I decided that I should try it again in 2021. I drew an illustration of Fox Wedding and made a prototype model. I uploaded a picture of it on SNS and received unexpected sensations. I did not expect the model to be well-liked by those who do not do origami, to my surprise.

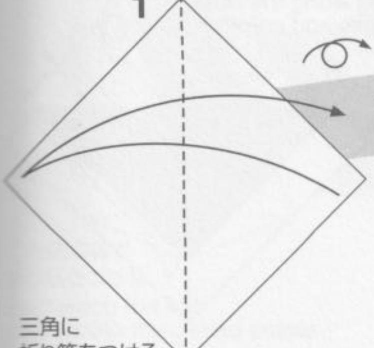
Steps 87-90 will be the hardest, but you can skip them actually, with a slight change in the shape. If you do not mind, you can skip and continue from Step 91.

This book contains "Fox wedding series," namely Bride, Groom, and Retainers (two kinds). With all of them you can make wedding procession. It is hard but worth a try.

The sizes of sheets used in the sample models will be the following.

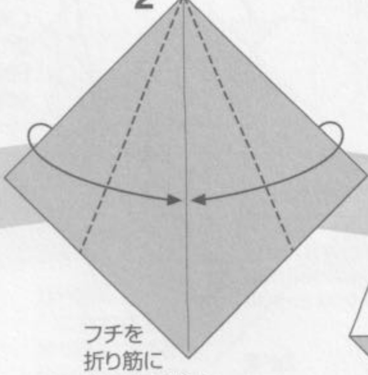
Bride : 40×40cm, Groom : 40×40cm、
Lantern Bearer : 27×27cm (Lantern : 12×9cm),
Umbrella Bearer : 30×30cm (Umbrella : [Interior, Exterior] : 18×18cm, [Head] : 3×3cm)

1



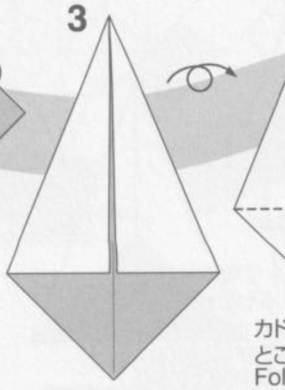
三角に
折り筋をつける
Fold in half and unfold.

2

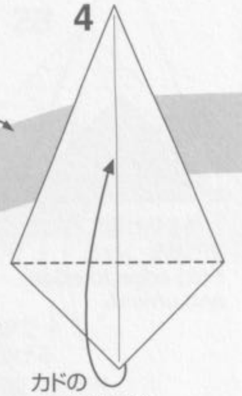


フチを
折り筋に
合わせて折る
Fold the edges
to the crease.

3

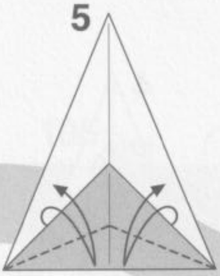


4



カドの
ところで折る
Fold the corner up.

5



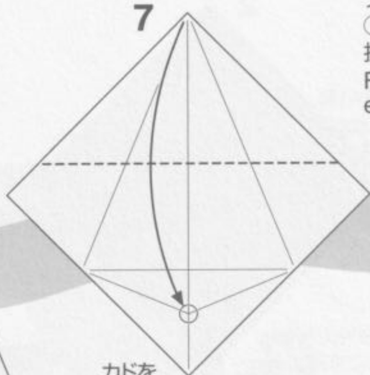
フチを折り筋に合わせて
折り筋をつける
Fold edge to edge
and unfold.

6



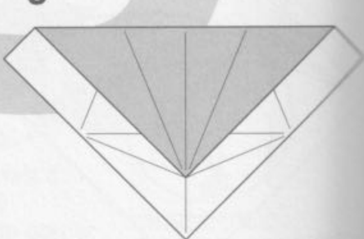
全部ひろげる
Unfold everything.

7

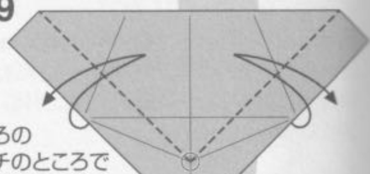


カドを
○に合わせて折る
Fold the corner to
the circled point.

8

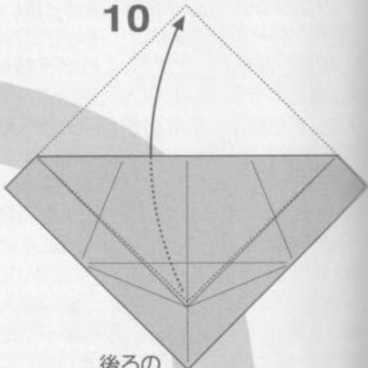


9



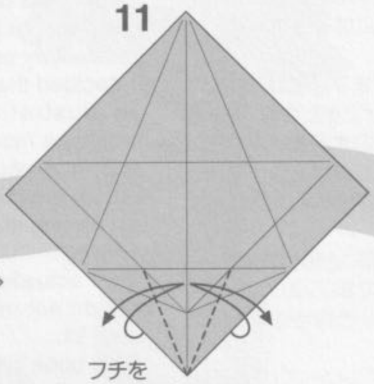
後ろの
フチのところで
○のところまで
折り筋をつける
Fold along the hidden
edges and unfold.

10



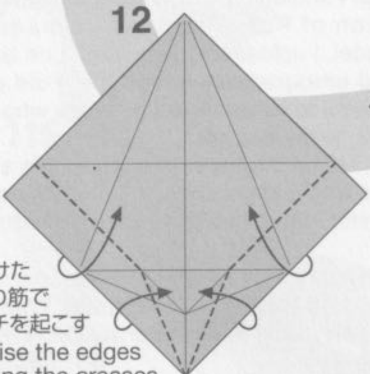
後ろの
カドをひろげる
Unfold.

11



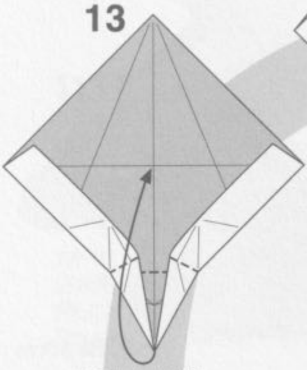
フチを
折り筋に合わせて
折り筋をつける
Fold the edges to the
crease and unfold.

12



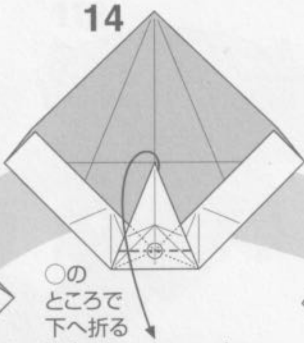
つけた
折り筋で
フチを起こす
Raise the edges
along the creases.

13



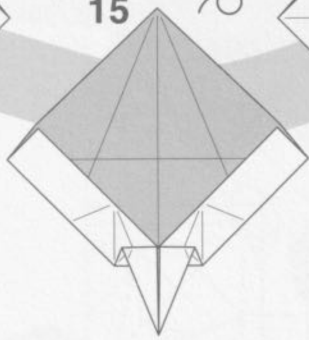
そのままカドを
ついている折り筋で
上へ折りたたむ
Fold the corner up
and flatten.

14

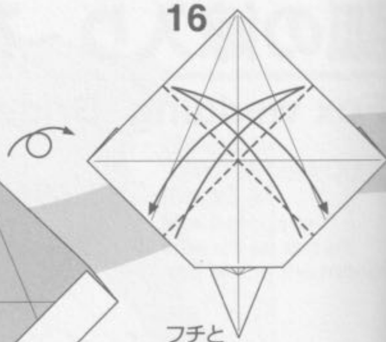


○の
ところで
下へ折る
Fold the corner down
at the circled point.

15



16



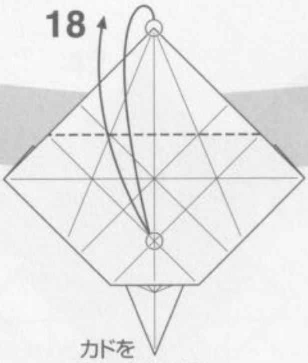
フチと
フチを合わせて
折り筋をつける
Fold edge to edge
and unfold.

17



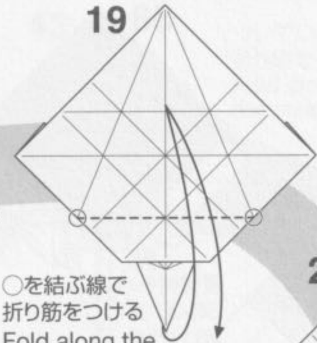
○を
それぞれ
結ぶ線で折り筋をつける
Fold along the line connecting the circled points and unfold.

18



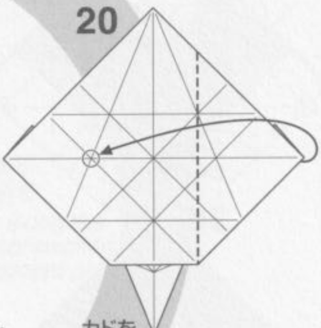
カドを
○に合わせて
折り筋をつける
Fold the corner to the circled point and unfold.

19



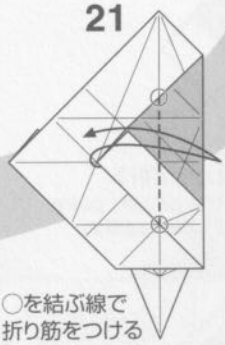
○を結ぶ線で
折り筋をつける
Fold along the line connecting the circled points and unfold.

20



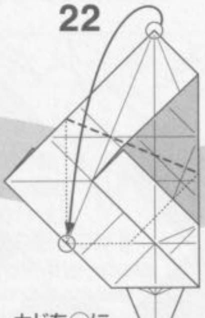
カドを
○に合わせて折る
Fold the corner to the circled point.

21



○を結ぶ線で
折り筋をつける
Fold along the line connecting the circled points and unfold.

22



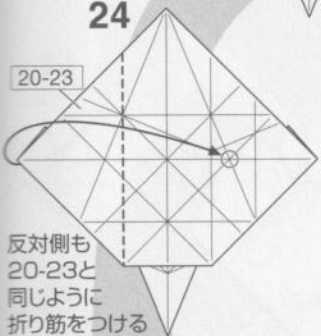
カドを○に
合わせて折る
Fold the corner to the circled point.

23



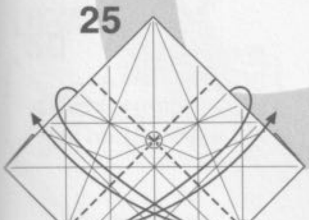
しっかりと
折り筋を
つけてから
20の形まで戻す
Unfold to 20.

24



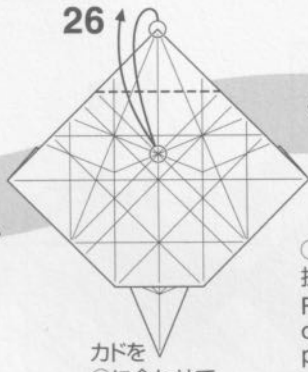
反対側も
20-23と
同じように
折り筋をつける
Repeat 20-23 on the other side.

25



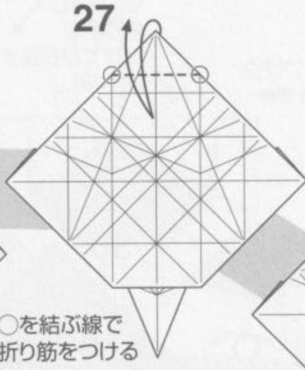
○を結ぶ線で
折り筋をつける
Fold along the line connecting the circled points and unfold.

26



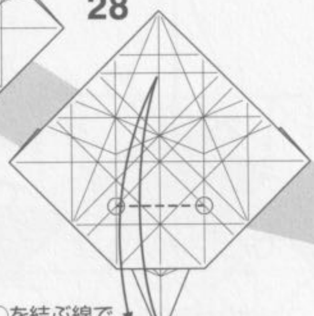
カドを
○に合わせて
折り筋をつける
Fold the corner to the circled point and unfold.

27



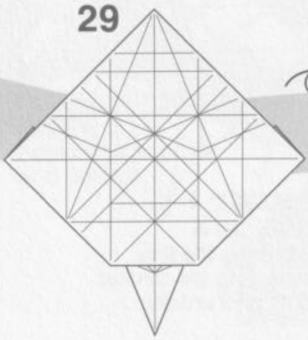
○を結ぶ線で
折り筋をつける
Fold along the line connecting the circled points and unfold.

28

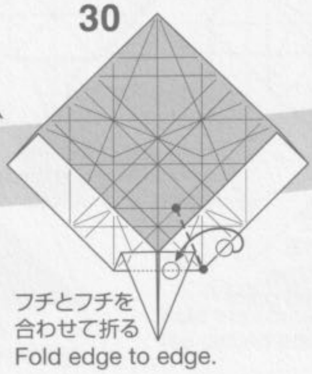


○を結ぶ線で
折り筋をつける
Fold along the line connecting the circled points and unfold.

29

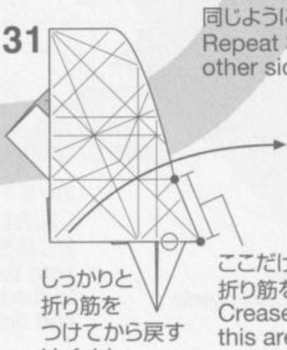


30



フチとフチを
合わせて折る
Fold edge to edge.

31



しっかりと
折り筋を
つけてから戻す
Unfold.

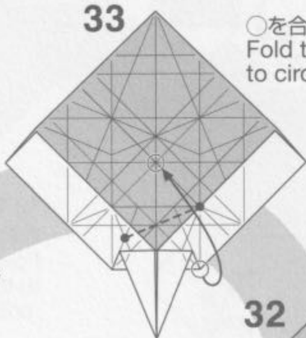
ここだけに
折り筋をつける
Crease only
this area.

32



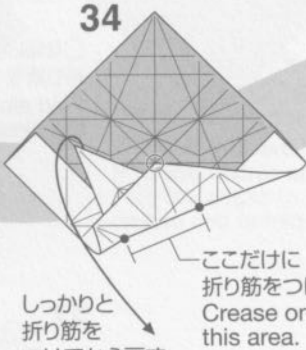
反対側も
30-31と
同じように折り筋をつける
Repeat 30-31 on the
other side.

33



○を合わせて折る
Fold the corner
to circled point.

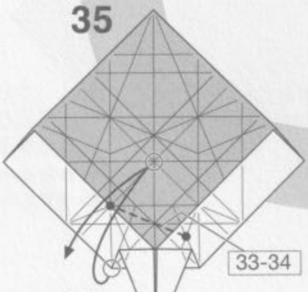
34



しっかりと
折り筋を
つけてから戻す
Unfold.

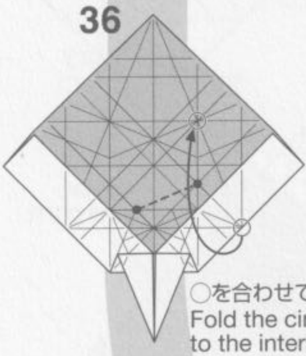
ここだけに
折り筋をつける
Crease only
this area.

35



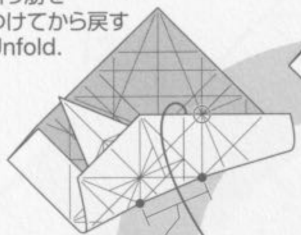
反対側も
33-34と
同じように折り筋をつける
Repeat 33-34 on the
other side.

36



○を合わせて折る
Fold the circled point
to the intersection.

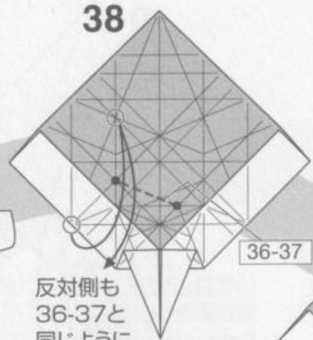
37



しっかりと
折り筋を
つけてから戻す
Unfold.

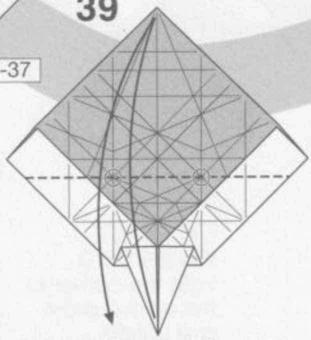
ここだけに
折り筋をつける
Crease only
this area.

38



反対側も
36-37と
同じように
折り筋をつける
Repeat 36-37 on the
other side.

39



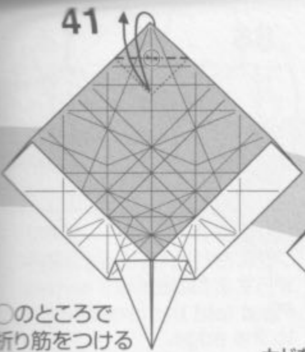
○を結ぶ線で折り筋をつける
Fold along the line connecting
the circled points and unfold.

40



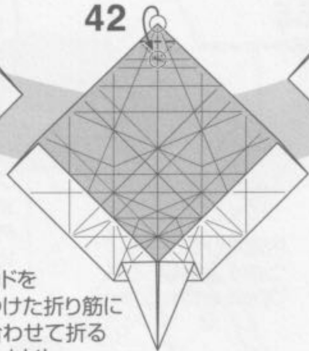
フチを
折り筋に
合わせて
印をつける
Fold the edge to the
crease and unfold,
but only mark the
middle point.

41



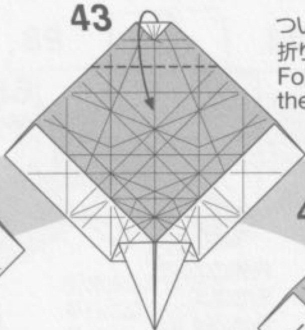
○のところで
折り筋をつける
Fold at the circled point and unfold.

42



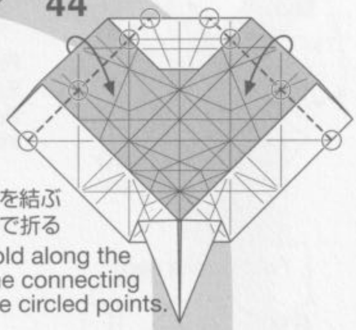
カドを
つけた折り筋に
合わせて折る
Fold the corner to the circled point.

43



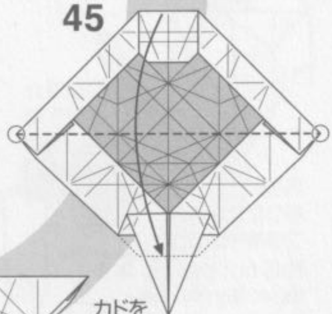
ついている
折り筋で下へ折る
Fold along the crease.

44



○を結ぶ
線で折る
Fold along the line connecting the circled points.

45



カドを
結ぶ線で折る
Fold along the line connecting the corners.

46

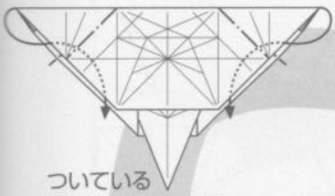


47



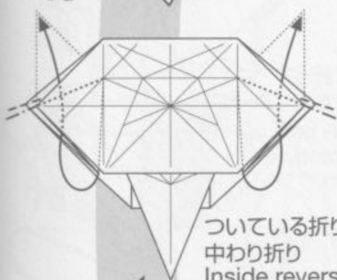
フチを
折り筋に
合わせて
折り筋をつける
Fold the edges to the crease and unfold.

48



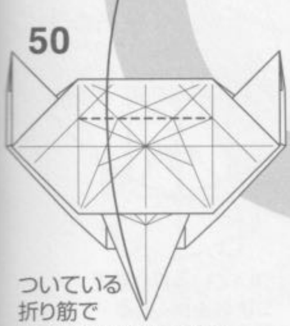
ついている
折り筋で中わり折り
Inside reverse fold.

49



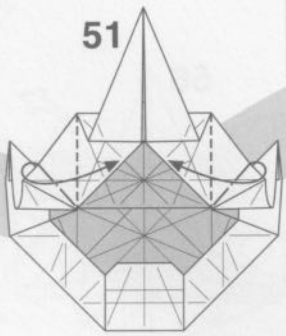
ついている折り筋で
中わり折り
Inside reverse fold.

50



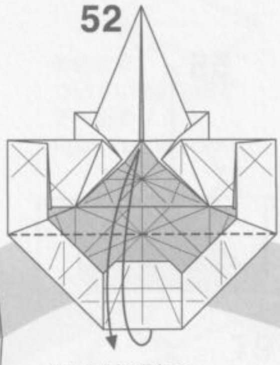
ついている
折り筋で
手前の部分を上へ折る
平らにはならない
Fold along the crease.
The model will not lie flat.

51



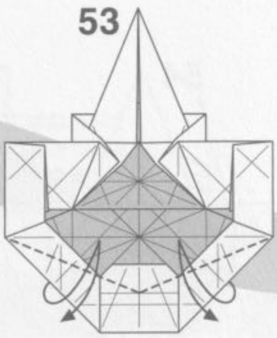
起き上がってきた部分を
ついている折り筋で
つぶすように折る
Squash using the creases.

52

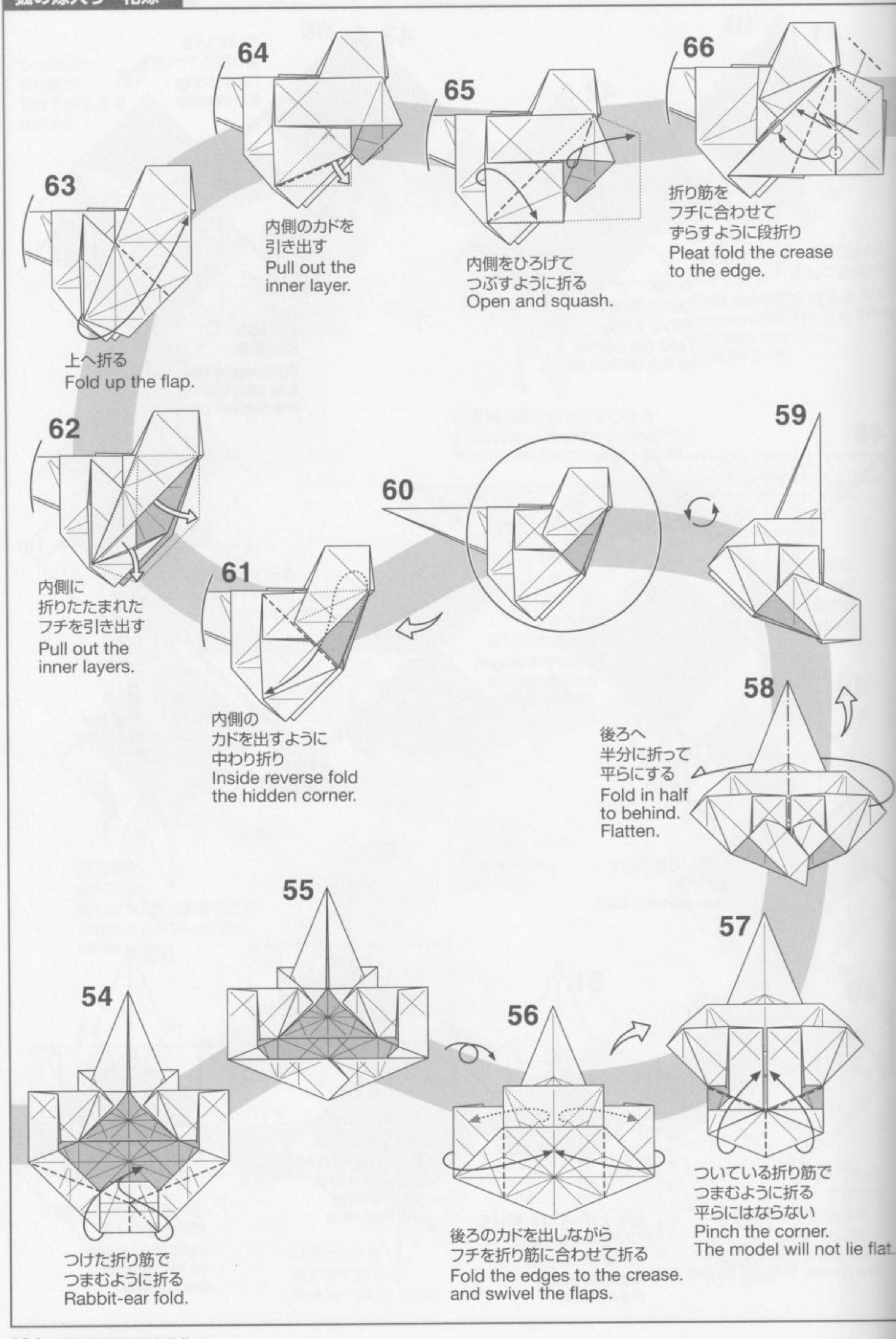


カドを結ぶ線で
折り筋をつける
Fold and unfold along the line connecting the corners.

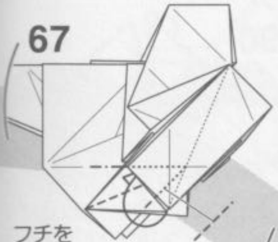
53



フチを折り筋に合わせて
折り筋をつける
Fold the edges to the crease and unfold.

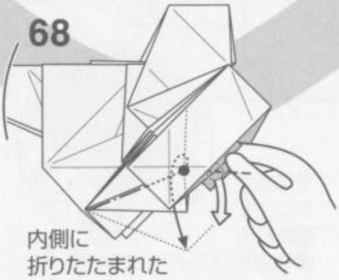

54
つけた折り筋で
つまむように折る
Rabbit-ear fold.
55
56
後ろのカドを出しながら
フチを折り筋に合わせて折る
Fold the edges to the crease.
and swivel the flaps.
57
ついている折り筋で
つまむように折る
平らにはならない
Pinch the corner.
The model will not lie flat.
58
後ろへ
半分に折って
平らにする
Fold in half
to behind.
Flatten.
59
60
61
内側の
カドを出すように
中わり折り
Inside reverse fold
the hidden corner.
62
内側に
折りたたまれた
フチを引き出す
Pull out the
inner layers.
63
上へ折る
Fold up the flap.
64
内側のカドを
引き出す
Pull out the
inner layer.
65
内側をひろげて
つぶすように折る
Open and squash.
66
折り筋を
フチに合わせて
ずらすように段折り
Pleat fold the crease
to the edge.

67



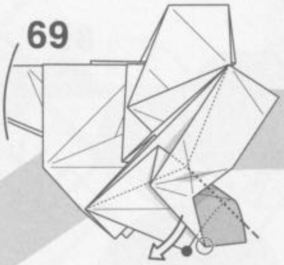
フチを
内側に折り込む
Swivel the edge inward.

68



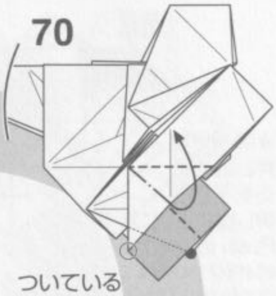
内側に
折りたたまれた
フチを引き出す
Pull out the layers.
The model will not lie flat.

69



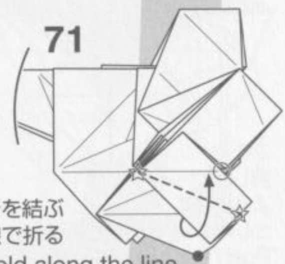
引き出した部分を
平らに折りたたむ
Flatten the model.

70



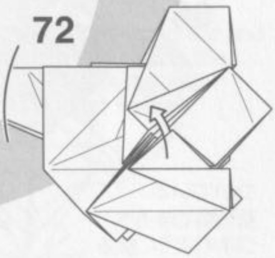
ついている
折り筋でひろげて
つぶすように折る
Open and squash using the creases.

71



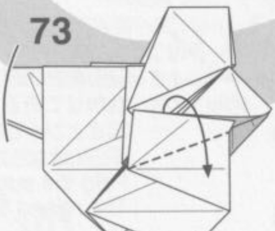
☆を結ぶ
線で折る
Fold along the line connecting the stared points.

72



カドをつまんで引き出す
Pull out the layers.

73



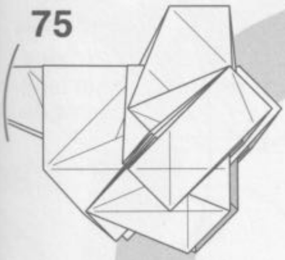
そのまま
ついている折り筋で
下へ折る
Fold the flap down.

74 61-73

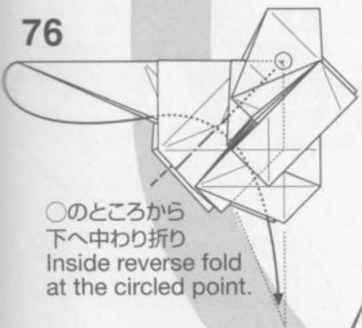


反対側も
61-73と
同じように折る
Repeat 61-73 on the other side.

75

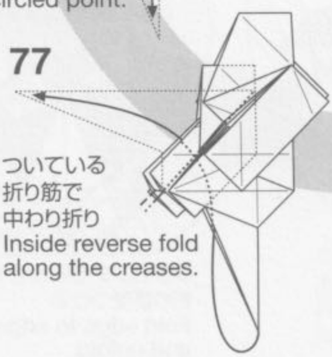


76



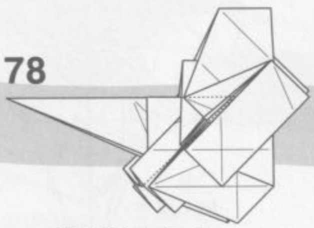
○のところから
下へ中わり折り
Inside reverse fold at the circled point.

77



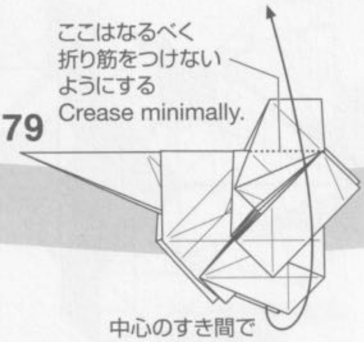
ついている
折り筋で
中わり折り
Inside reverse fold along the creases.

78



76の形まで戻す
Unfold to 76.

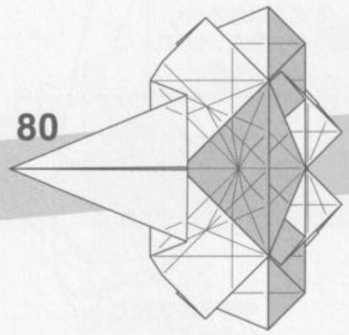
79



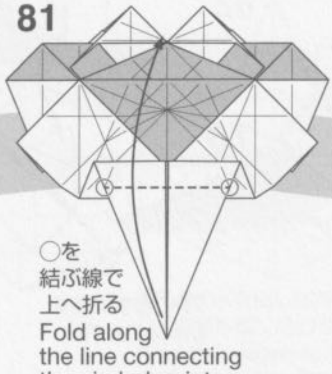
ここはなるべく
折り筋をつけない
ようにする
Crease minimally.

中心のすき間で
ひろげる
Open the model.

80

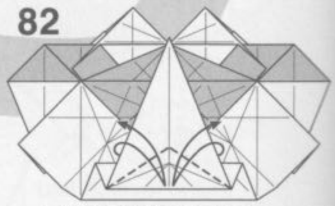


81



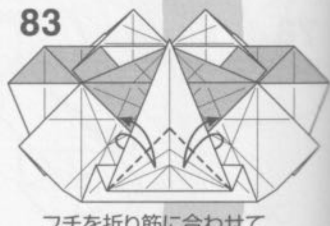
○を
結ぶ線で
上へ折る
Fold along
the line connecting
the circled points.

82



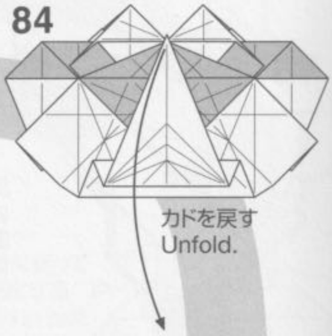
フチとフチを合わせて
折り筋をつける
Fold edge to edge
and unfold.

83



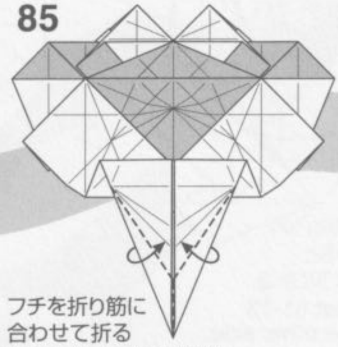
フチを折り筋に合わせて
折り筋をつける
Fold the edges to the
creases and unfold.

84



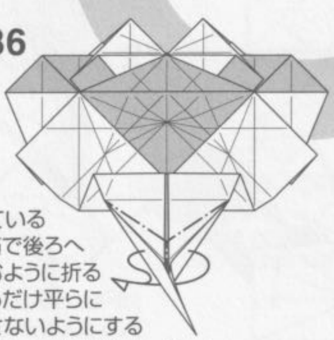
カドを戻す
Unfold.

85



フチを折り筋に
合わせて折る
起き上がってきたカドは
平らにはならない
Fold the edges to the crease.
The raised flap is not flattened.

86



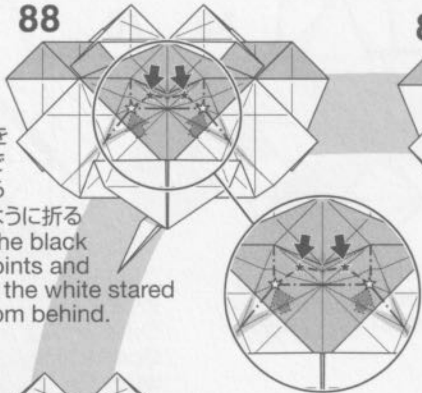
ついている
折り筋で後ろへ
つまむように折る
できるだけ平らに
つぶさないようにする
Rabbit-ear fold to behind
using the creases.
Try not to flatten the flap.

87



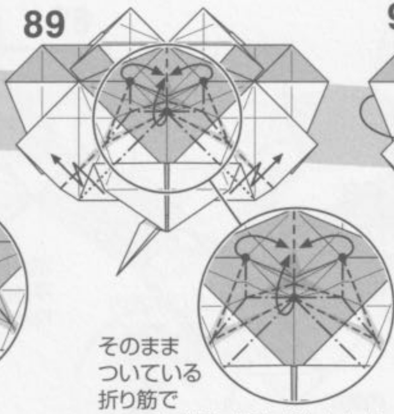
フチを
押し込む
ようにして
ついている折り筋で折る
Push the edge down
at the crease.

88



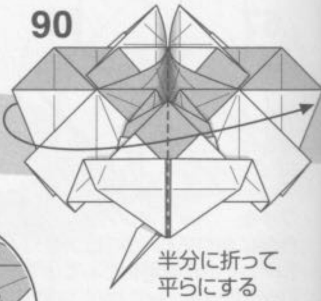
★の部分を
押し込んで
☆を下から
押し出すように折る
Push in the black
stared points and
push out the white stared
points from behind.

89



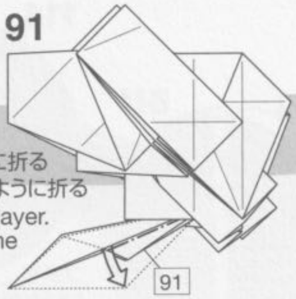
そのまま
ついている
折り筋で
●を合わせるように折りたたむ
Assemble using the creases
so that the dotted points
will meet.

90



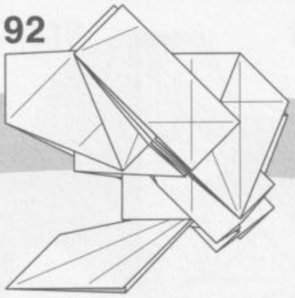
半分に折って
平らにする
Fold in half
and flatten
the model.

91

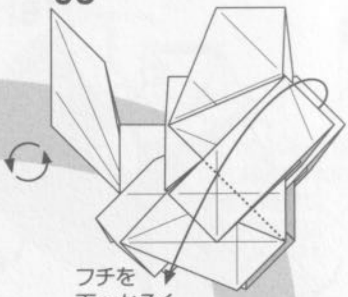


内側のフチを
引き出すように折る
反対側も同じように折る
Pull out the layer.
Repeat on the other side.

92

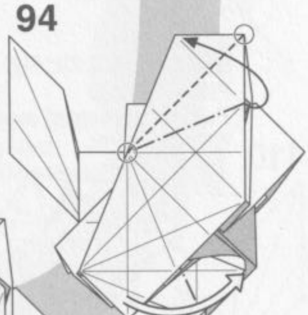


93



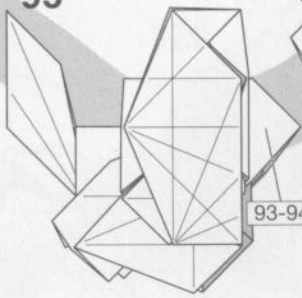
フチを
下へかるく
ひろげるように折る
Fold the flap down softly.

94



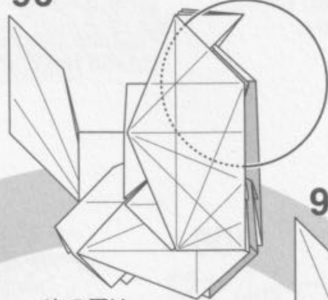
ついている折り筋を
つまんで○を結ぶ線で
折りたたむ
Fold along the line connecting the circled points and swivel.

95



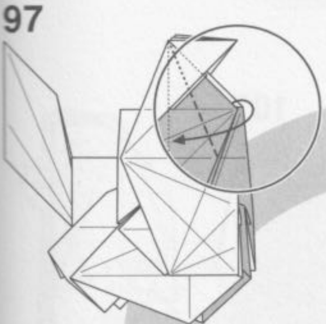
反対側も93-94と
同じように折る
Repeat 93-94 on the other side.

96



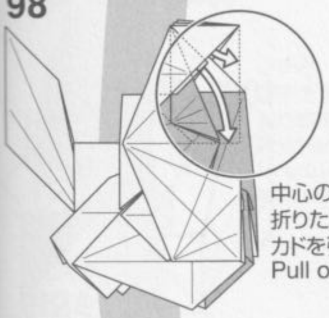
次の図は
手前の1枚を透かして
内側を見る
The next step shows the inner view.

97



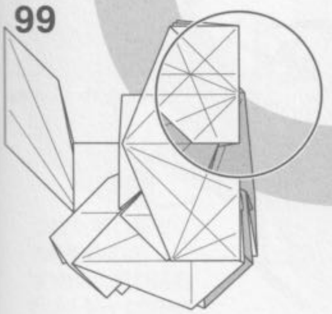
中央のカドを斜めに折る
Fold the middle layer as shown.

98

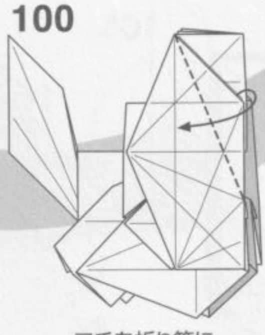


中心の
折りたたまれた
カドを引き出す
Pull out the layers.

99

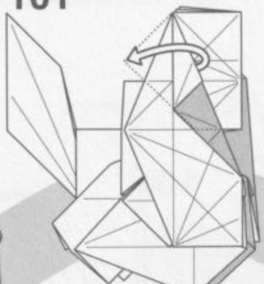


100



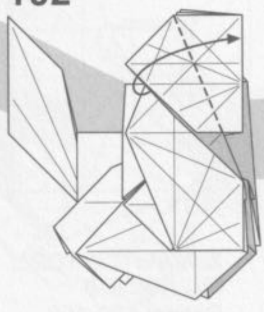
フチを折り筋に
合わせて折る
Fold the edge to the crease.

101



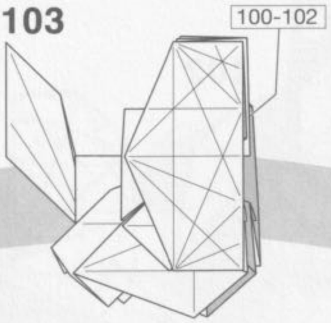
内側に折りたたまれた
フチを引き出す
Pull out the layer.

102



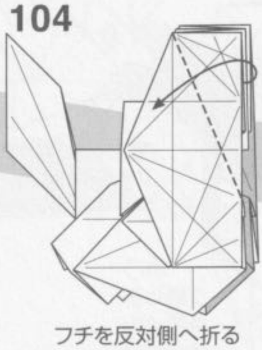
フチを反対側へ折る
Fold the flap to the other side.

103



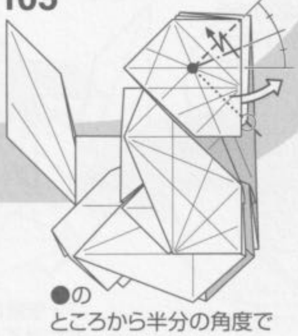
反対側も100-102と
同じように折る
Repeat 100-102
on the other side.

104



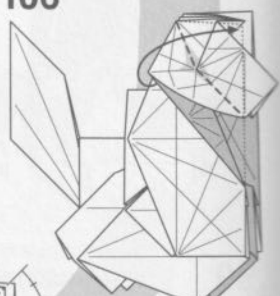
フチを反対側へ折る
Fold the flap
to the other side.

105



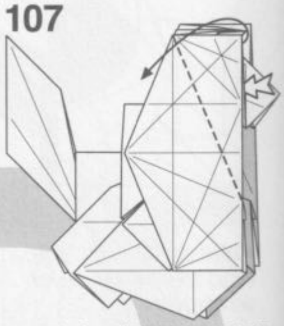
●の
ところから半分の角度で
ずらすように段折り
Crimp the layer
at the angle bisector.

106



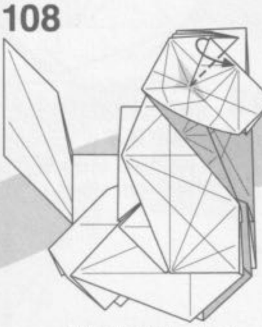
閉じるように折る
Close the layer.

107



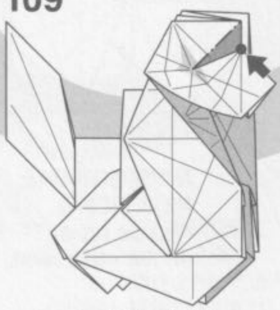
もう一度かるくひろげる
Open the layer lightly.

108



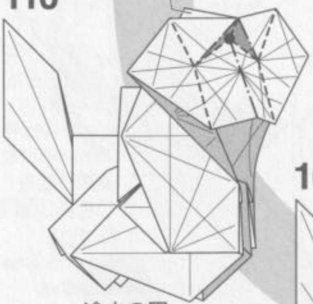
カドを反対側へ折る
Fold the flap
to the other side.

109



■の部分を内側に
押し込むように折る
Sink the darkened area.

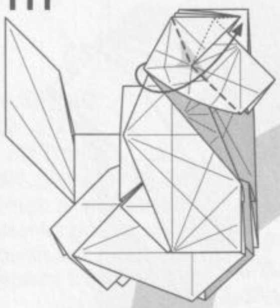
110



途中の図
In progress...

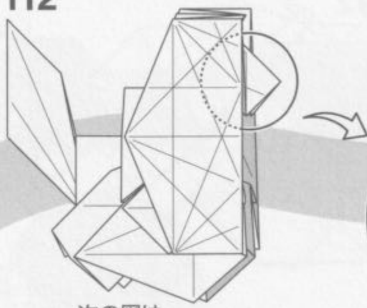
■の部分をこのヒダの
内側に押し込む
Put the darkened area
into this layer.

111



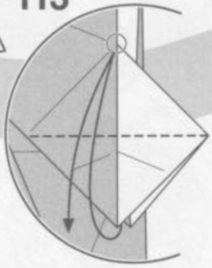
閉じるように折る
Close the layer.

112



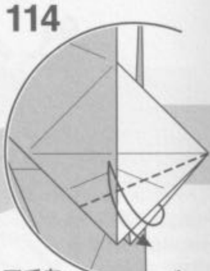
次の図は
手前の1枚を透かして
内側を見る
The next step shows
the inner view.

113



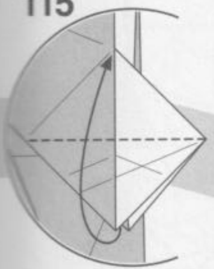
カドを○に合わせて
折り筋をつける
Fold the corner to the
circled point and unfold.

114



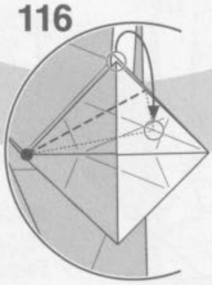
フチを
つけた折り筋に合わせて
折り筋をつける
Fold the edge to the
crease and unfold.

115



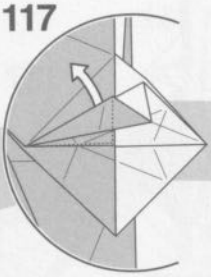
ついている折り筋で
上へ折る
Fold up the corner
along the crease

116



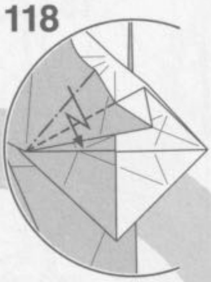
カドを●のところから
折り筋に合わせて折る
Fold the corner to the
circled point at the
dotted point.

117



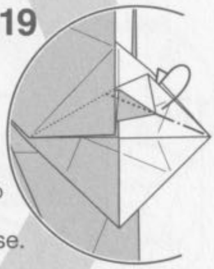
フチを引き出す
Pull out the layer.

118



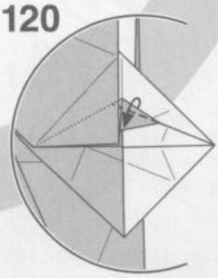
ついている折り筋の
山と谷を入れ替えて
手前に段折り
Pleat using
the creases.

119



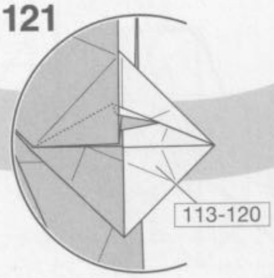
ついている
折り筋で
フチを後ろへ折る
Fold behind
along the crease.

120



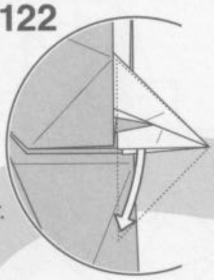
フチのところで
手前に折る
Fold along the
hidden edge.

121



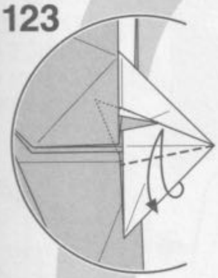
反対側も113-120と
同じように折る
Repeat 113-120
on the other side.

122



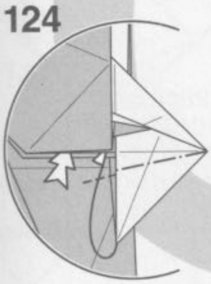
内側のカドを
引き出す
Pull out the
inner corner.

123



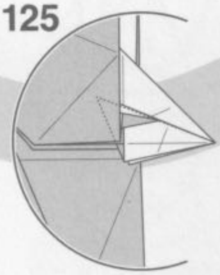
フチと
フチを合わせて
折り筋をつける
Fold edge
to edge
and unfold.

124

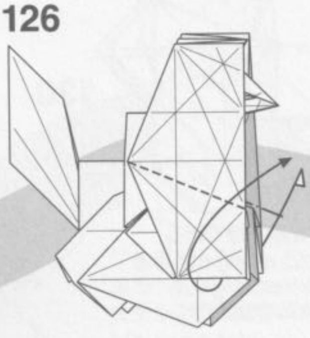


つけた折り筋で
カドを中心の
すき間に折り込む
Fold the corner
inside along
the creases.

125

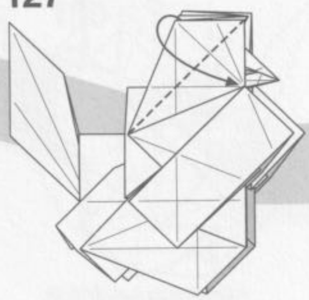


126



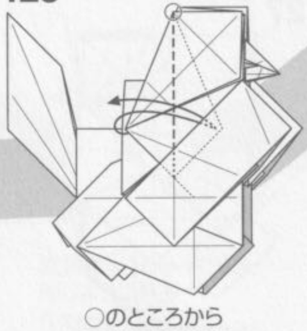
フチを反対側へ折る
Fold the flaps
to the other side.

127



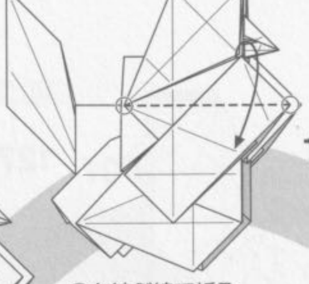
フチを反対側へ折る
Fold the flap
to the other side.

128



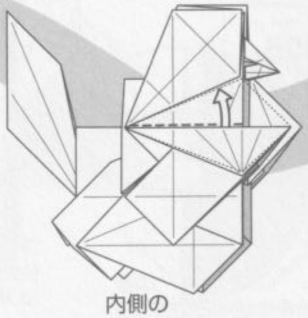
○のところから
垂直に折り筋を
つける
Fold and unfold.

129



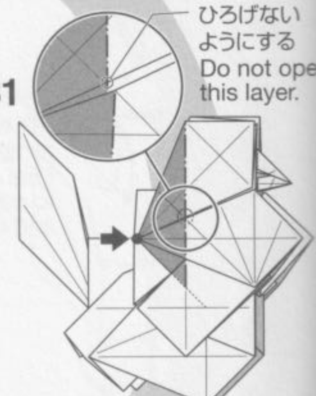
○を結ぶ線で折る
Fold along the line
connecting the
circled points.

130



内側の
フチを引き出す
Pull out the
hidden corner.

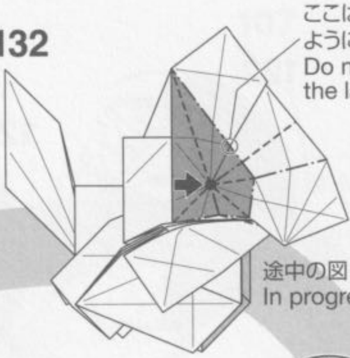
131



ここは
ひろげない
ようにする
Do not open
this layer.

128でつけた
折り筋で沈め折り
次の図も参照
Sink using the creases
made in 128.
See also the next step.

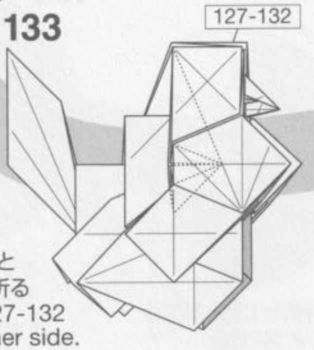
132



ここはひろげない
ようにする
Do not open
the layers here.

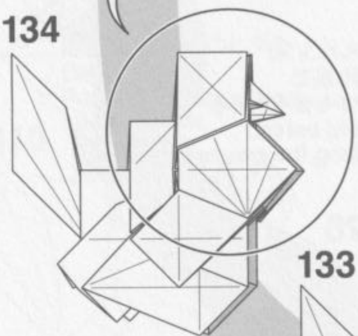
途中の図
In progress...

133

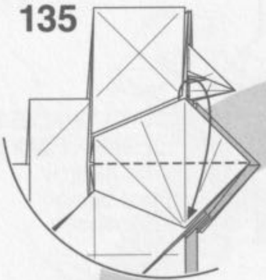


反対側も
127-132と
同じように折る
Repeat 127-132
on the other side.

134

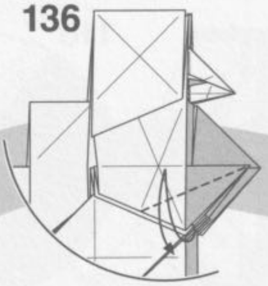


135



カドを下へ折る
Fold the flap down.

136



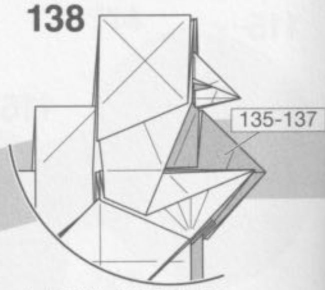
フチとフチを合わせて
折り筋をつける
Fold edge to edge
and unfold.

137



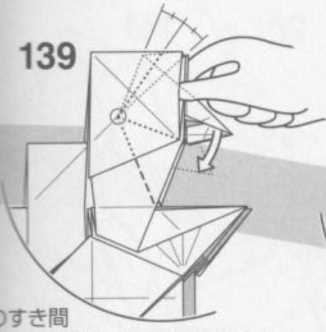
ついている折り筋で
フチを内側に引き寄せる
ように折る
Fold the edge to inside
along the creases.

138



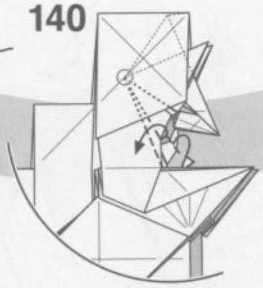
反対側も135-137と
同じように折る
Repeat 135-137
on the other side.

139



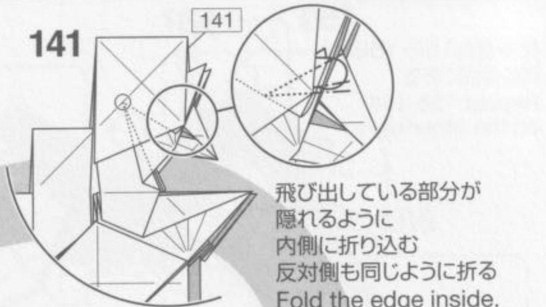
図のすき間
(綿帽子と耳のカドのすき間)で
つまんで○のところから
半分くらいの角度で下へずらす
Pull down the head
by rotating the flaps
of the ears.

140



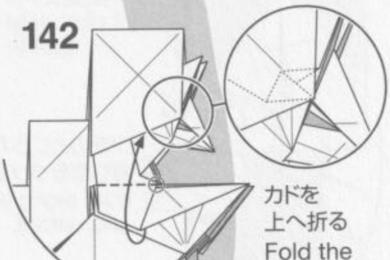
平らになるように
折りたたむ
Flatten the model.

141



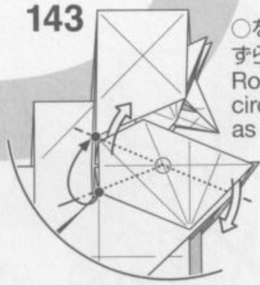
飛び出している部分が
隠れるように
内側に折り込む
反対側も同じように折る
Fold the edge inside.
Repeat on the other side.

142



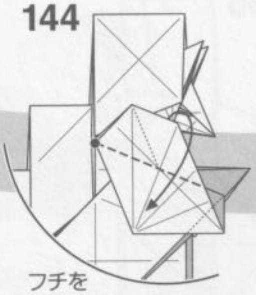
カドを
上へ折る
Fold the
flap up.

143



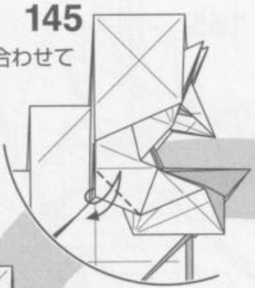
○を支点に
ずらすように折る
Rotate with a
circled point
as a pivot.

144



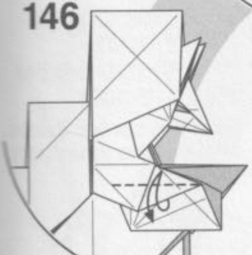
フチを
ひらくところで
下へ折る
Fold the flap down.

145



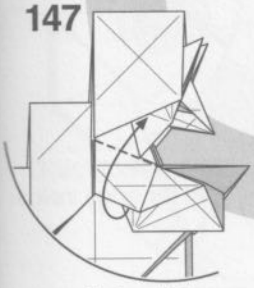
フチを折り筋に合わせて
折り筋をつける
Fold the edge
to the crease
and unfold.

146



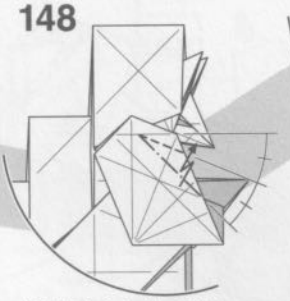
フチとフチを合わせて
折り筋をつける
Fold edge to edge
and unfold.

147



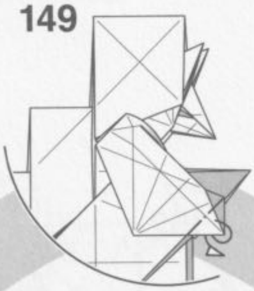
フチを上へ折る
Fold the flap up.

148



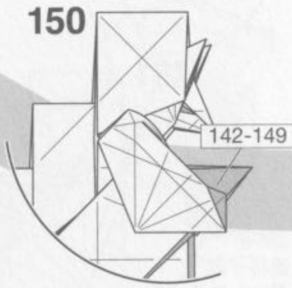
折り筋を合わせて後ろへ
引き寄せるように段折り
立体になる
Pleat at an angle bisector
and make the arm 3-D

149



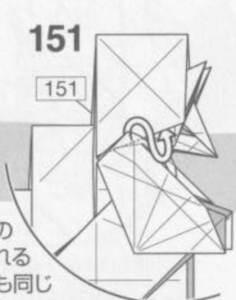
フチのところで
後ろへ折って
山折りの折り筋をつける
Mountain fold
along the edge
and unfold.

150



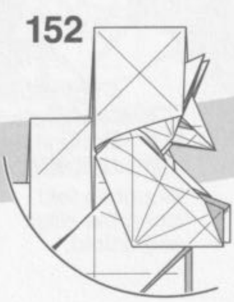
反対側も142-149と
同じように折る
Repeat 142-149
on the other side.

151

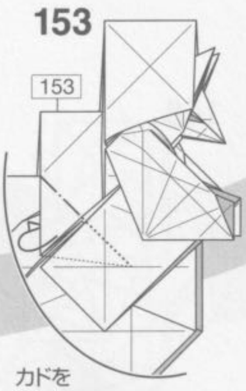


カドを
綿帽子の
下に入れる
反対側も同じ
Insert the corner
under the layer.
Repeat on the other side.

152

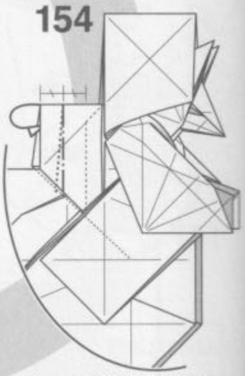


153



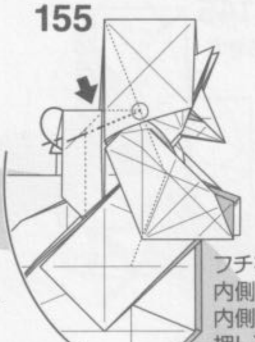
カドを
いっぱいのところで
後ろへ折る
反対側も同じように折る
Mountain fold the flap.
Repeat on the other side.

154



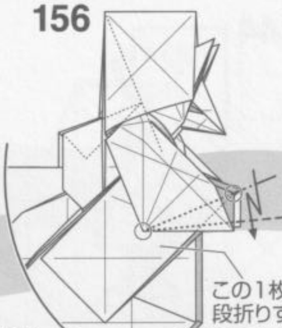
フチを内側に折り込む
Fold the edge inside.

155



フチを○のところから
内側に折り込む
内側で引っかかる部分は
押し込んでつぶす
Fold the corner inside.
Squash the inner part.

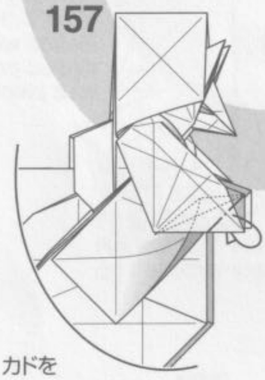
156



この1枚だけ
段折りする
Pleat only
this layer.

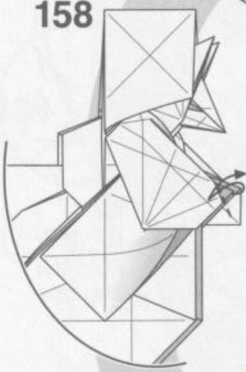
○を
結ぶ線で
後ろへ引き寄せるように
斜めに段折り
Pleat using the line connecting
the circled points.

157



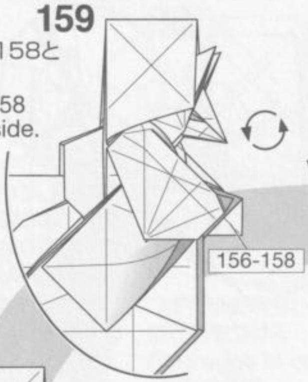
カドを
ついている折り筋で
後ろへ折る
Fold the corner
to behind along
the crease.

158



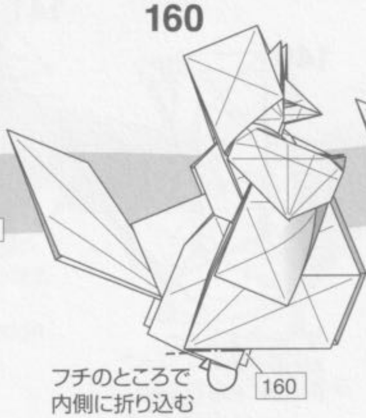
フチのところで
折り筋をつける
Fold along the edge
and unfold.

159



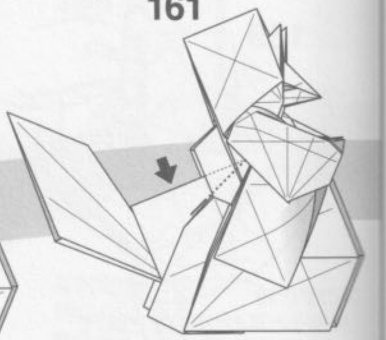
反対側も156-158と
同じように折る
Repeat 156-158
on the other side.

160



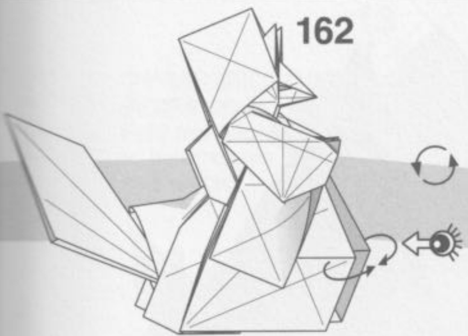
フチのところで
内側に折り込む
反対側も同じように折る
Fold the corner to inside.
Repeat on the other side.

161



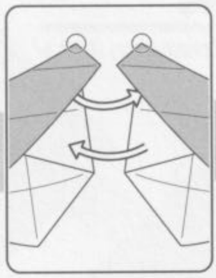
フチのところで
押し込むように折る
Push along the edges.

162



フチを曲げて合わせる
次の図はこのフチだけを
手前から見る
Bend and make the layers overlapped.
The next step shows only this part from the front.

163



○を合わせてフチを
それぞれ重ねる
Make the circled points meet so the layers will overlap.

164

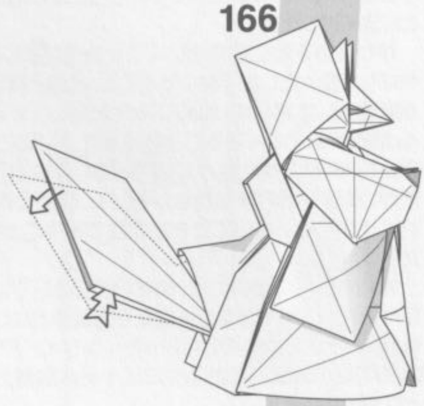


まとめて後ろへ
折って留める
Mountain fold to lock.

165

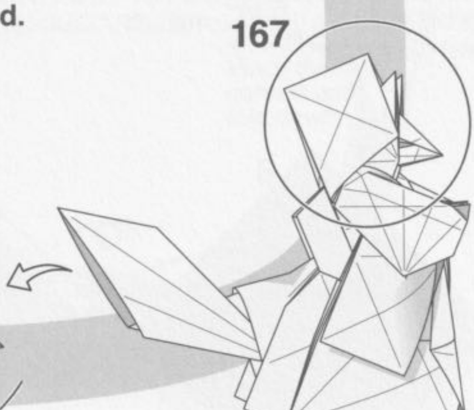


166

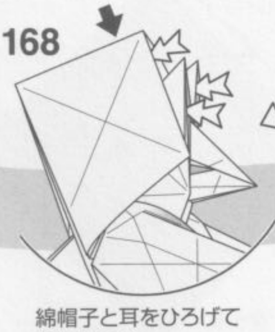


尻尾を少し下げて形を整える
Pull down slightly and shape the tail.

167

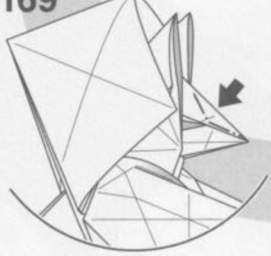


168



綿帽子と耳をひろげて
形を整える
Shape the Bridal hood and ears.

169



フチを押し込んで
顔を立体的にして
形を整える
Push and shape the face.

170



フチをかるく起こして
表情をつける反対側も同じ
Raise the flap.
Repeat on the other side.

171



172

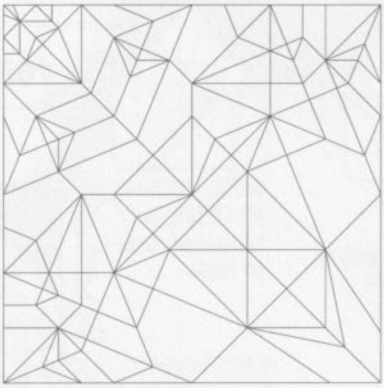


できあがり
Model completed.

狐の嫁入り - 花婿 -

Fox wedding -Groom-

Created in 2021





推奨用紙 40cm

狐の嫁入りの花嫁ができてから少し後、頭部のデザインを流用して他の作品が作れることに気が付きました。そこで、まずは花嫁の対になる存在として花婿を作ることに決めました。

作り始める前に目標をいくつか設定しました。背筋を伸ばした堂々とした姿勢にすること。花嫁と同じサイズの紙を使用した場合に、単純に身長を高めにするだけでなく、顔をやや小さくすることで頭身を上げること。そして何より、花嫁の横に並べても見劣りしない造形などでしたが、実現するのはなかなか難しく、改めて花嫁が奇跡的に上手く噛み合ってできた作品であることを感じました。

特に造形面においては、単体の作品としては残念ながら袴の表現などをかなり妥協をする結果となりました。とは言え、花嫁では多用しなかったインサイドアウトの技法などによって、並べて飾る分には十分な説得力が出せたとは思っています。

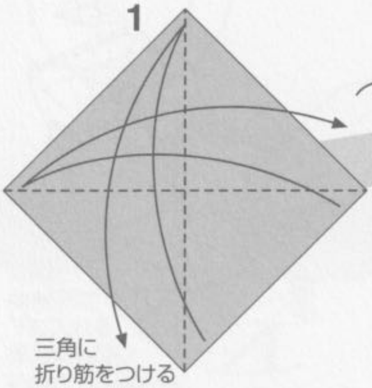
やや特殊な「ひろげてつぶす」手順が多いこともあって、序盤の折り筋をつける工程が長めです。難解な折り紙作品では一般的な話になりますが、できるだけ正確に折り筋をつけるようにすると中盤以降リズムよく折り進められるはずです。

Shortly after I made a Bride, I found that the design of the head of the model could be adopted to another model. I decided to design a Groom naturally.

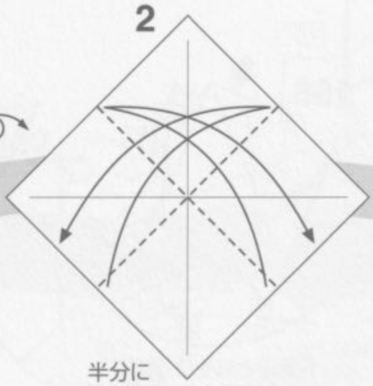
I set some goals in the beginning. First, the Groom should have an imposing posture with a straight back. Second, the Groom should be slightly taller than the bride when using the same size paper as the bride. Third, the face should be slightly smaller to make it well-proportioned. Finally and importantly, the figure should not look inferior when placed next to the Bride. It was so difficult to achieve these goals, and I felt that Bride was a miraculously successful work of art.

We had to make a lot of compromises in the shaping and structures, partly because of the restrictions placed on the finished size. Nevertheless, I believe that the color-change technique, which I did not use extensively in Bride, was convincing enough to display the two side by side.

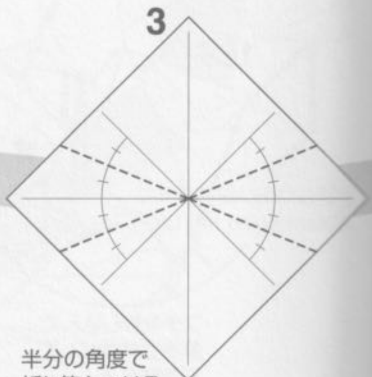
You will find so long steps with creasing and unfolding, as the model has so many open-and-squash steps later. This is often found in complex models, and, as usual, making creases as precisely as possible will make your life much easier.



三角に
折り筋をつける
Fold in halves
and unfold.

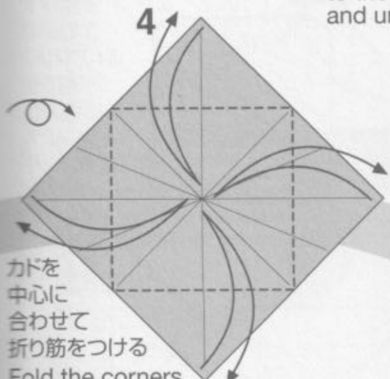


半分に
折り筋をつける
Fold in halves
and unfold.



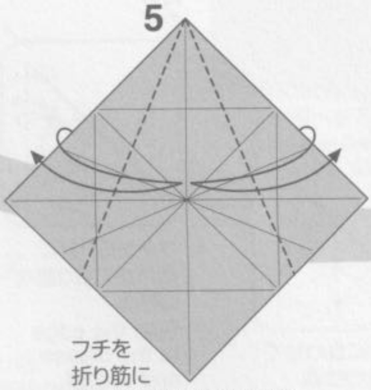
半分の角度で
折り筋をつける
Fold and unfold
at angle bisectors.

4



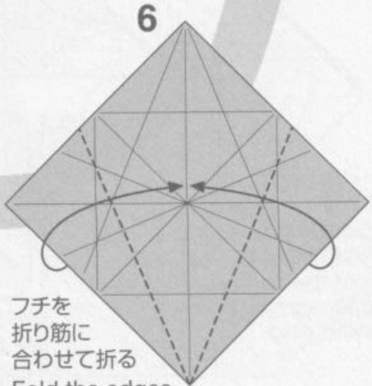
カドを
中心に
合わせて
折り筋をつける
Fold the corners
to the center and unfold.

5



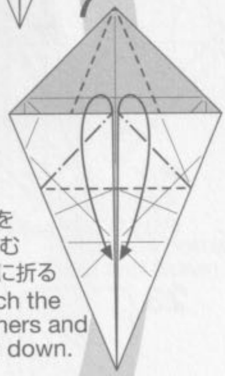
フチを
折り筋に
合わせて折り筋をつける
Fold the edges to the
crease and unfold.

6



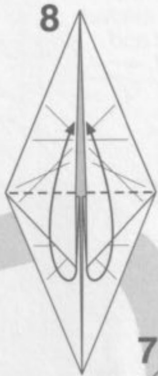
フチを
折り筋に
合わせて折る
Fold the edges
to the crease.

7



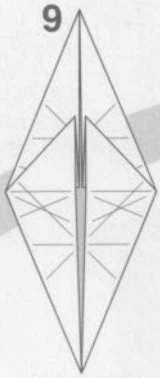
カドを
つまむ
ように折る
Pinch the
corners and
fold down.

8



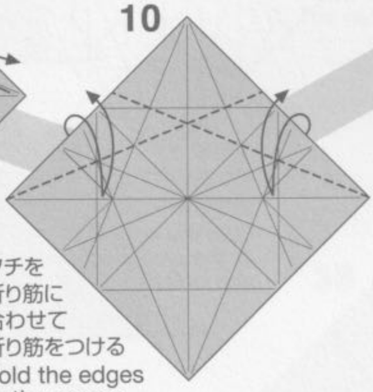
カドを
上へ折る
Fold the
corners up.

9



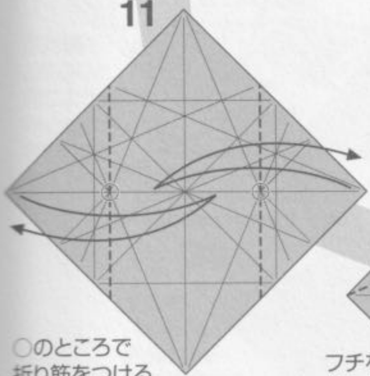
全部ひろげる
Unfold
everything.

10



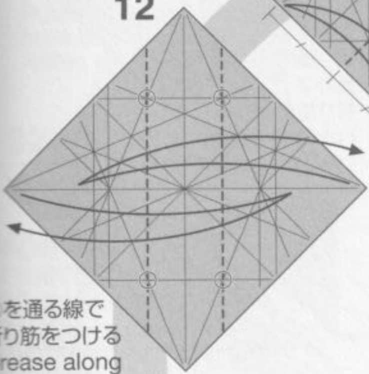
フチを
折り筋に
合わせて
折り筋をつける
Fold the edges
to the crease
and unfold.

11



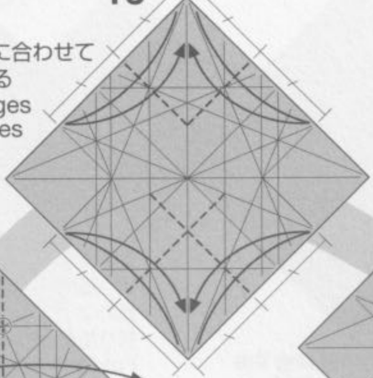
○のところで
折り筋をつける
Fold at the circled
points and unfold.

12



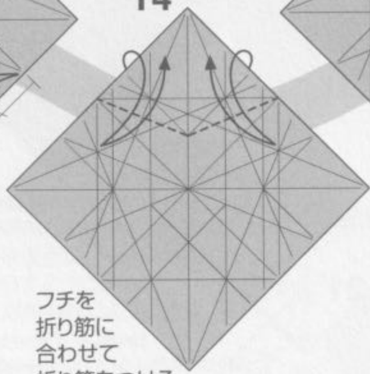
○を通る線で
折り筋をつける
Crease along
the line connecting
the circled points.

13



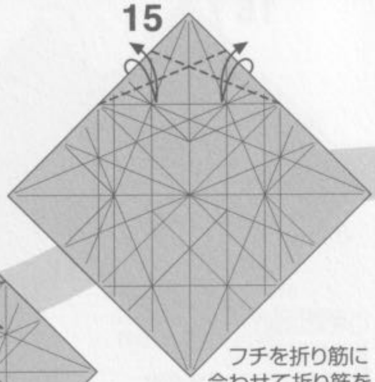
フチを折り筋に合わせて
折り筋をつける
Fold the edges
to the creases
and unfold.

14



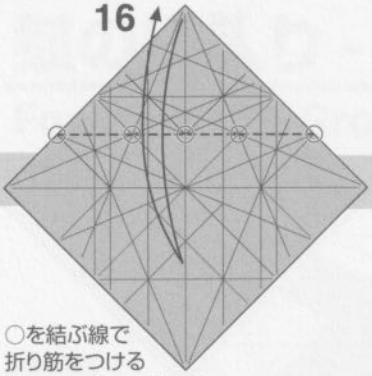
フチを
折り筋に
合わせて
折り筋をつける
Fold the edges
to the creases
and unfold.

15



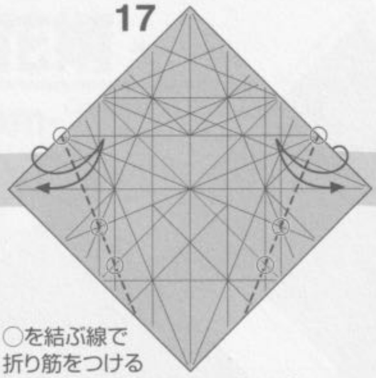
フチを折り筋に
合わせて折り筋を
つける
Fold the edges
to the crease
and unfold.

16



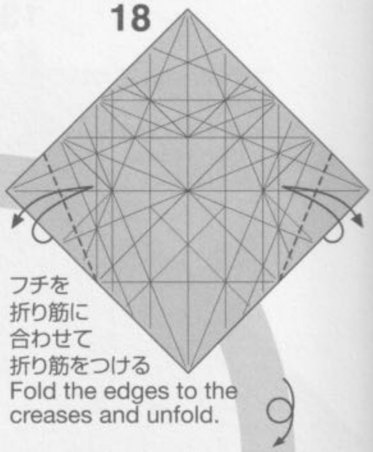
○を結ぶ線で
折り筋をつける
Crease along the line connecting the circled points.

17



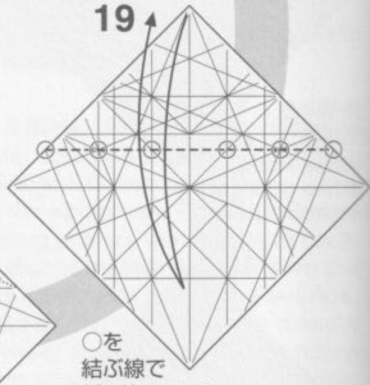
○を結ぶ線で
折り筋をつける
Fold the lines connecting the circled points. and unfold.

18



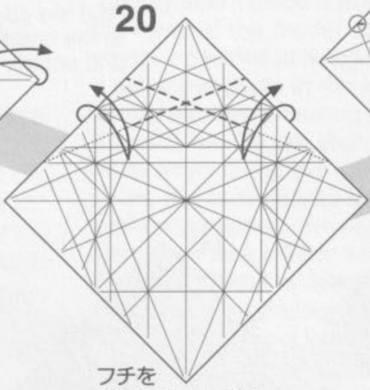
フチを
折り筋に
合わせて
折り筋をつける
Fold the edges to the creases and unfold.

19



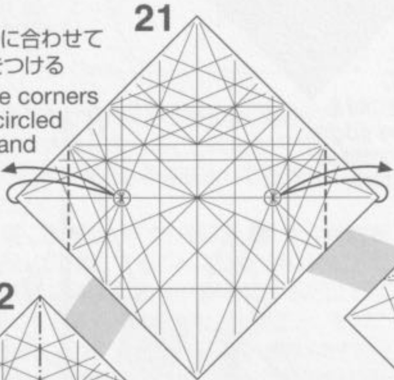
○を
結ぶ線で
折り筋をつける
Crease along the line connecting the circled points.

20



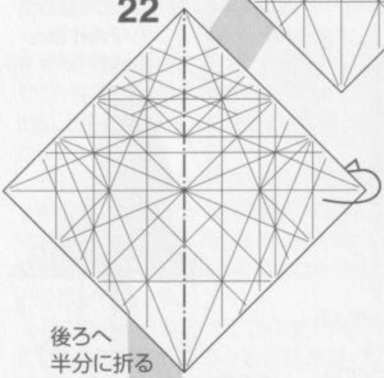
フチを
折り筋に合わせて
折り筋をつける
Fold the edges to the crease and unfold.

21



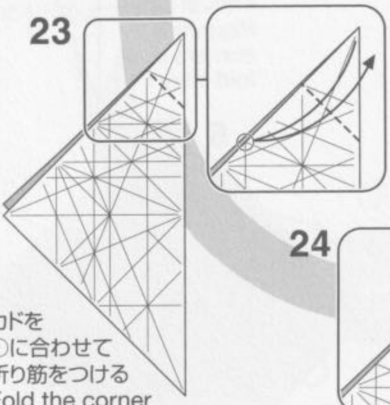
カドを○に合わせて
折り筋をつける
Fold the corners to the circled points and unfold.

22



後ろへ
半分に折る
Fold in half behind.

23



カドを
○に合わせて
折り筋をつける
Fold the corner to the circled point and unfold.

24



カドを○に合わせて
折り筋をつける
Fold the corner to the circled point and unfold.

25



フチを折り筋に
合わせて折り筋を
つける
Fold the edge to the crease and unfold.

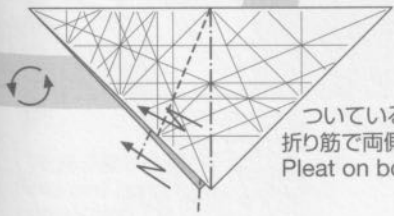
26



27

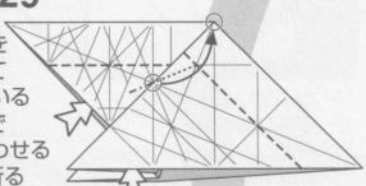


28



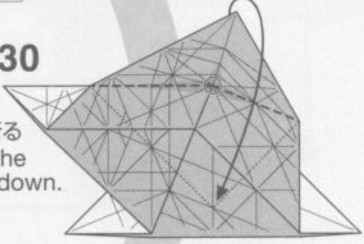
ついている
折り筋で両側で段折り
Pleat on both sides.

29



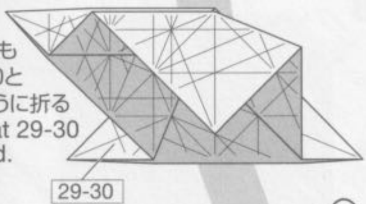
すき間を
ひろげて
ついている
折り筋で
○を合わせる
ように折る
平らにはならない
Fold the circled point to the corner along the creases.
The model will not lie flat.

30



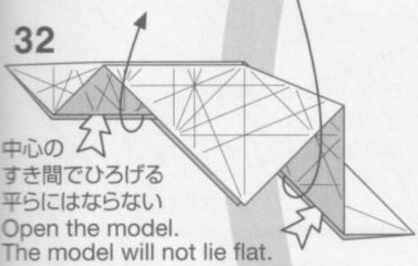
カドを
下へ折る
Fold the layer down.

31



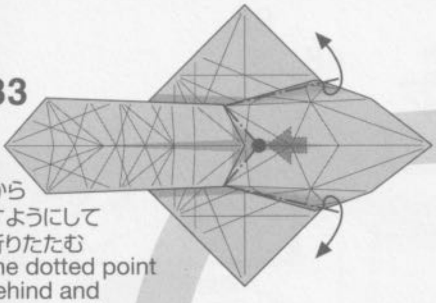
反対側も
29-30と
同じように折る
Repeat 29-30 behind.

32



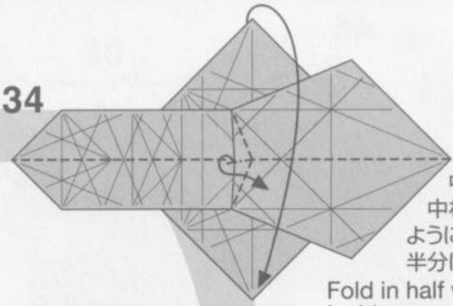
中心の
すき間でひろげる
平らにはならない
Open the model.
The model will not lie flat.

33



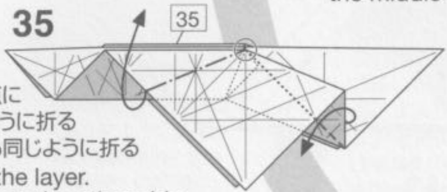
後ろの
すき間から
押し出すようにして
平らに折りたたむ
Push the dotted point from behind and flatten the model.

34



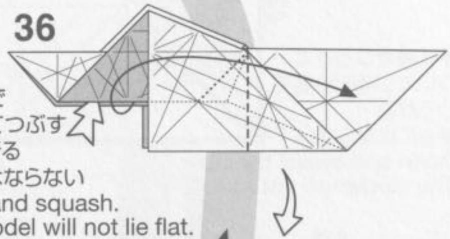
中心のフチを
中わり折りの
ように折りながら
半分に折る
Fold in half while Inside reverse folding the middle layer.

35



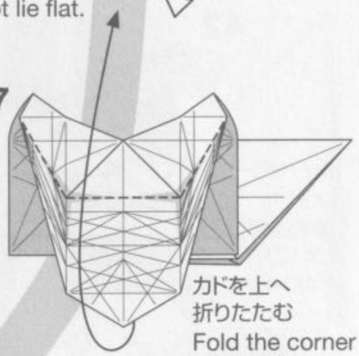
○を支点に
ずらすように折る
反対側も同じように折る
Swivel the layer.
Repeat on the other side.

36



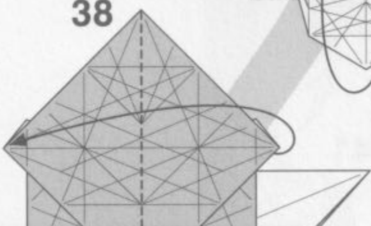
中心の
すき間で
ひろげてつぶす
ように折る
平らにはならない
Open and squash.
The model will not lie flat.

37



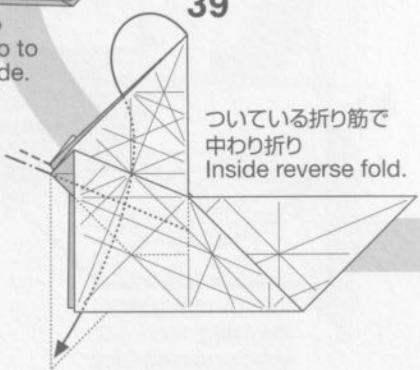
カドを上へ
折りたたむ
Fold the corner up and flatten.

38



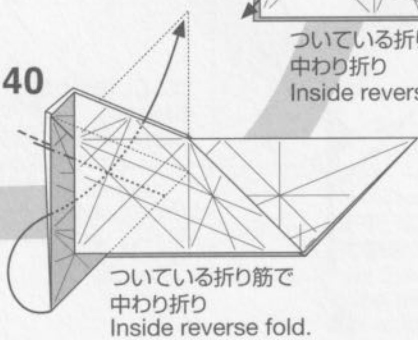
反対側へ折る
Fold the flap to the other side.

39



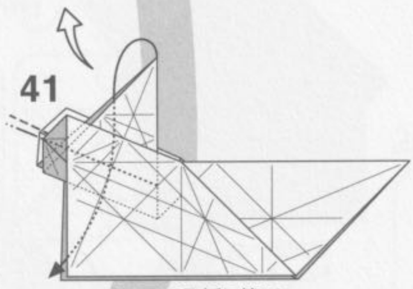
ついている折り筋で
中わり折り
Inside reverse fold.

40



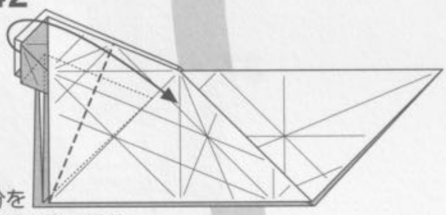
ついている折り筋で
中わり折り
Inside reverse fold.

41



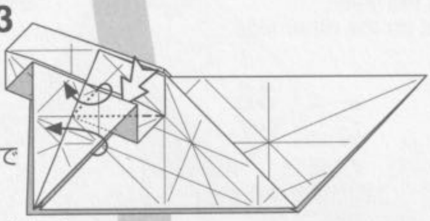
ついている折り筋で
中わり折り
Inside reverse fold.

42



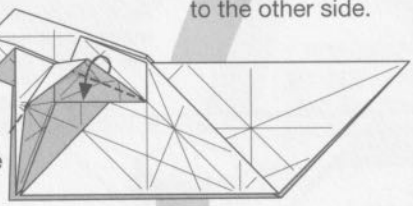
手前の部分を
ついている折り筋で折る
Fold along the crease.

43



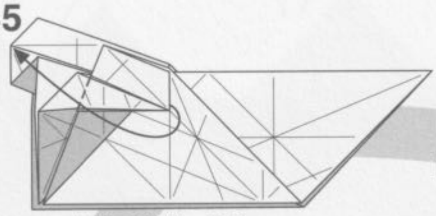
すき間をひろげて
ついている折り筋で
ひろげる
平らにはならない
Open and swivel the layer.
The model will not lie flat.

44



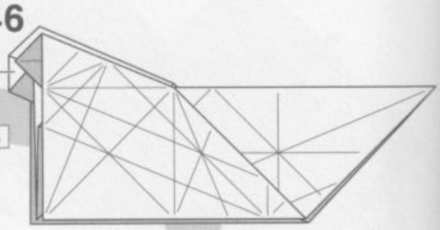
フチを
合わせて
折りたたむ
Fold edge
to edge.

45



カドを反対側へ折る
Fold the flap
to the other side.

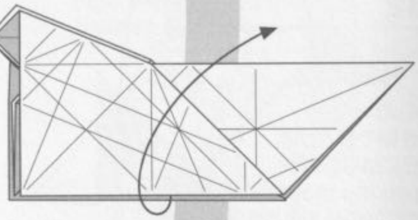
46



42-45

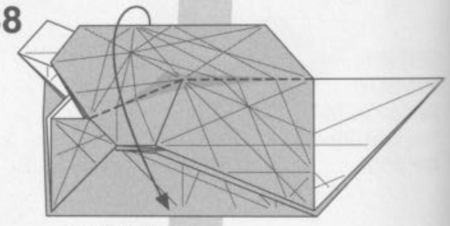
反対側も42-45と
同じように折る
Repeat 42-45
behind.

47



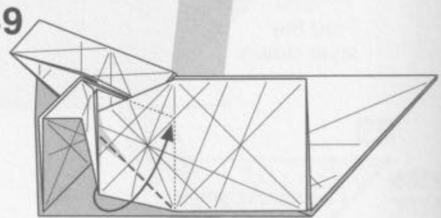
フチをひろげる
Open the layer.

48



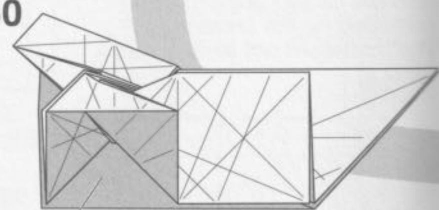
ついている
折り筋でフチを下へ折る
Fold the edge down
along the creases.

49



ついている折り筋で
平らに折りたたむ
Fold along the crease
and flatten the model.

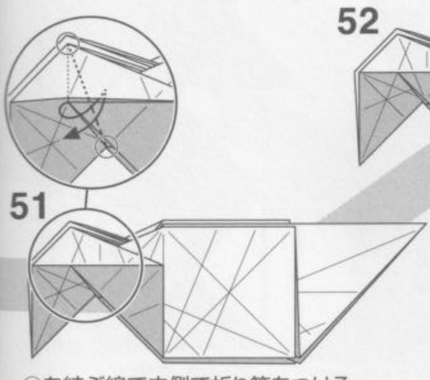
50



47-49

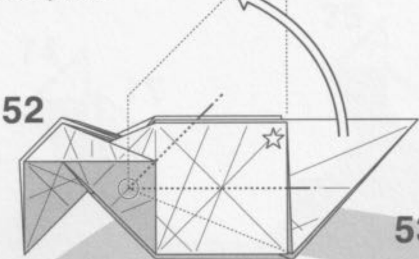
反対側も47-49と
同じように折る
Repeat 47-49
on the other side.

51



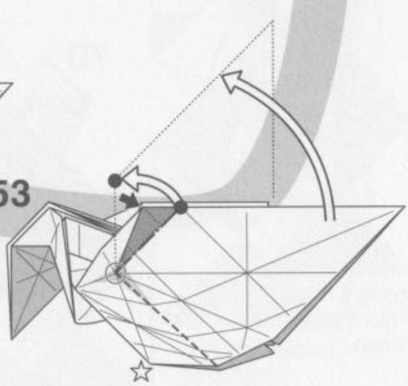
○を結ぶ線で内側で折り筋をつける
Fold and unfold along the line connecting the circled points.

52



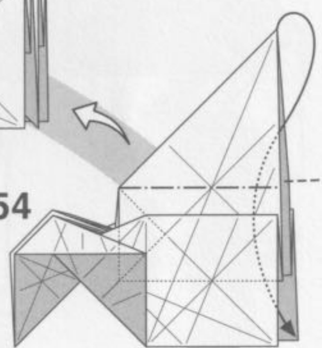
中心のカドを
○のところから
ずらすように折る
次の図も参照
Swivel the corner as shown in the next step.

53



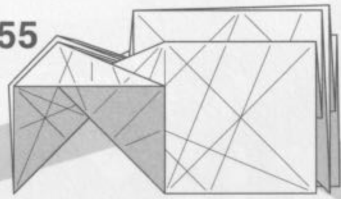
52の手前の部分を
ひろげた図
The inner view in progress....

54

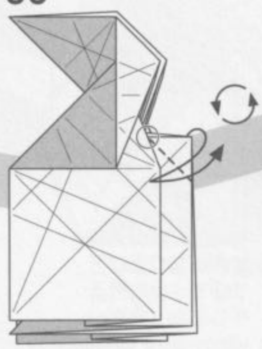


ついている折り筋で
中わり折り
Inside reverse fold.

55

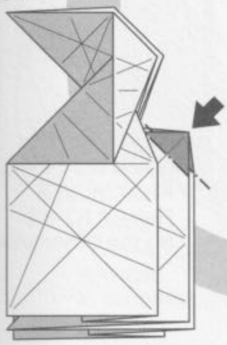


56



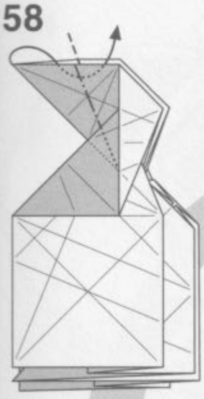
○のところで
三角に折り筋をつける
Crease at the circled point.

57



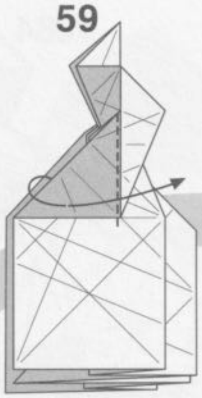
つけた折り筋で
沈め折り(Open sink)
Open sink along the creases.

58



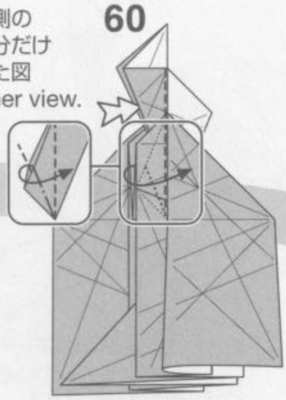
ついている折り筋で
中わり折り
Inside reverse fold.

59



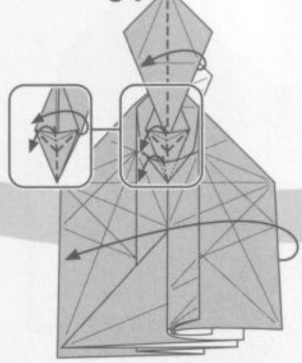
手前のフチを
フチのところで
反対側へ折る
Fold the flap along the edge.

60



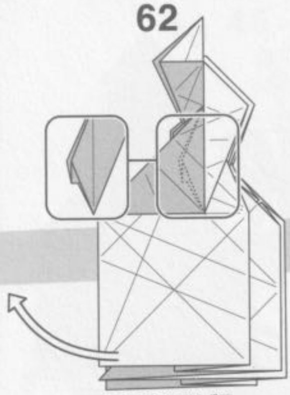
中心のカドをひろげて
つぶすように折る
Spread sink the hidden corner.

61



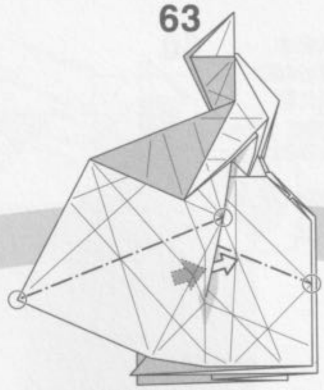
つぶしてできたフチを
起こすように折りながら
フチを戻す
Unfold the layers while raising the middle layer.

62



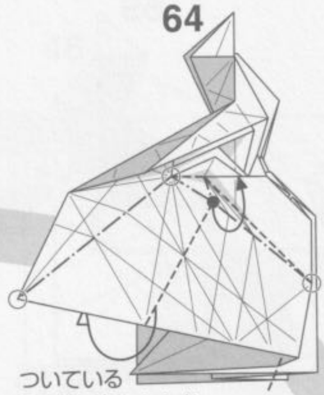
かるくひろげる
Open the layer.

63



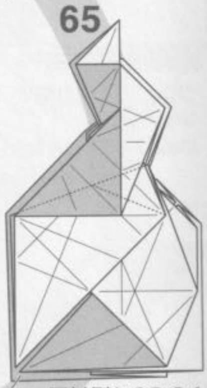
○を結ぶ線でついている
折り筋を山折りにする
平らにはならない
Make mountain creases
along the line connecting
the circled points.
The model will not lie flat.

64



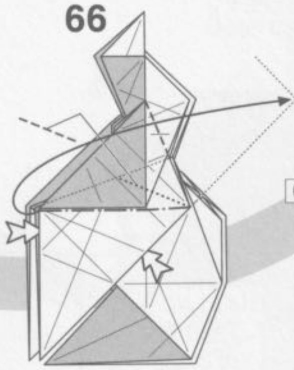
ついている
折り筋で折りたたむ
Assemble using
the creases.

65



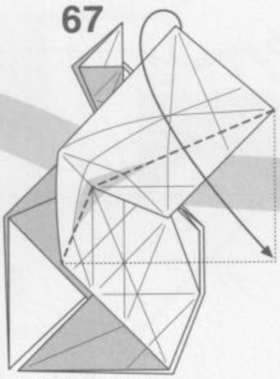
62-64 反対側も62-64と
同じように折る
Repeat 62-64
on the other side.

66



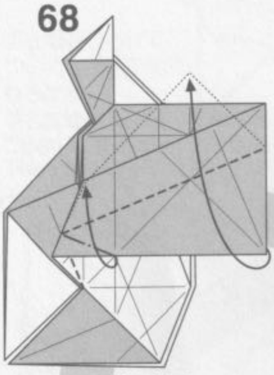
すき間をひろげて
つぶすように折る
平らにはならない
Open and squash.
The model will
not lie flat.

67



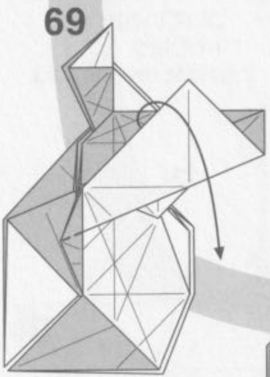
ついている折り筋で
折りたたむ
Flatten using
the creases.

68



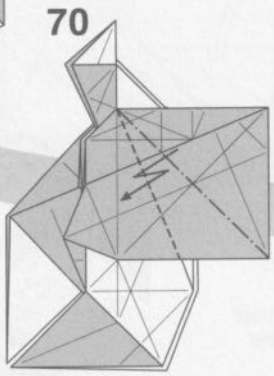
ついている折り筋で
折りたたむ
Fold up the corner
and squash.

69



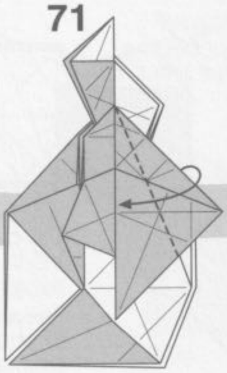
カドを下へ折る
Fold the corner
down.

70



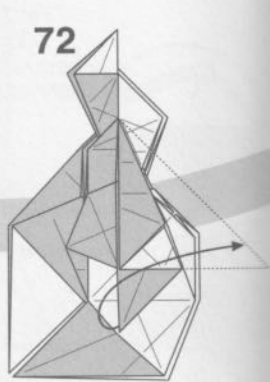
折り筋を合わせて
斜めに段折り
Pleat.

71



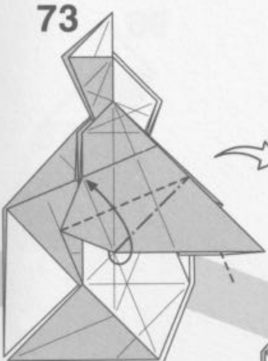
フチとフチを
合わせて折る
Fold edge to edge.

72



カドを反対側へ
ひろげる
Unfold.

73



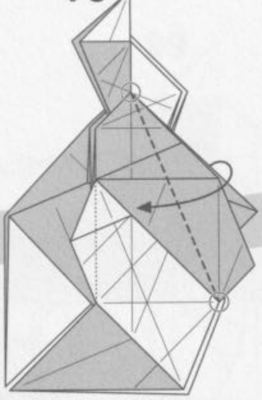
ついている
折り筋を使って
ひろげてつぶす
ように折る
Swivel fold using
the creases.

74



フチを後ろへかぶせる
Wrap to behind
around the corner.

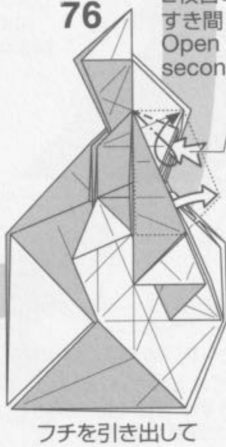
75



○を結ぶ線で折る
Fold along the line
connecting the
circled points.

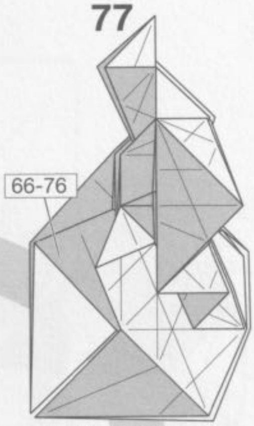
76

上から
2枚目の
すき間
Open the
second layer.



フチを引き出して
折りたたむ
Pull out the layer
and swivel.

77

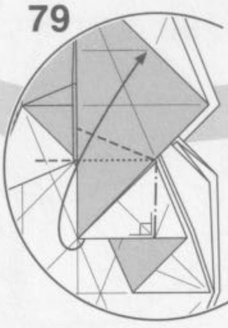


反対側も66-76と
同じように折る
Repeat 66-76
behind.

78

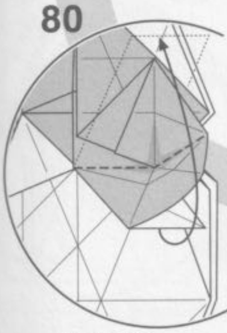


79



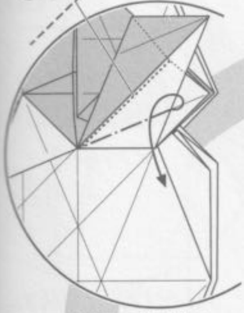
ついている折り筋で
カドを上へ折って
折りたたむ
Fold the corner up
along the crease
and squash.

80



途中の図
In progress...

81



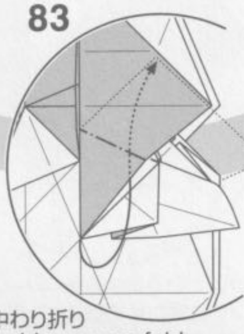
内側をひろげて
つぶすように折る
Open and squash.

82



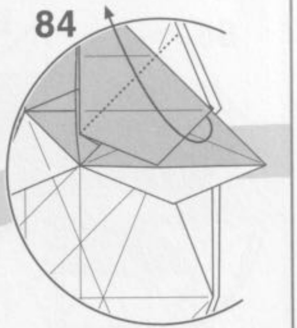
カドを下へかるくひろげる
折り筋はできるだけ
つけないようにする
Open the layer.

83



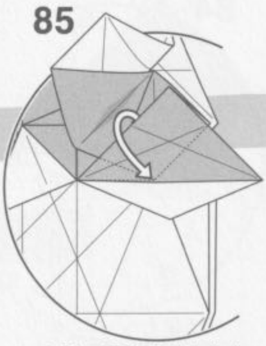
中わり折り
Inside reverse fold.

84



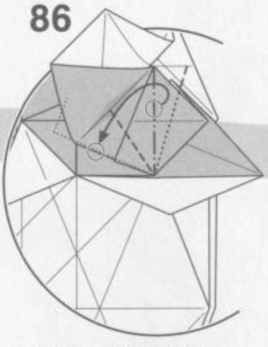
フチを上へ
かるくひろげる
折り筋はできるだけ
つけないようにする
Open the layer.

85



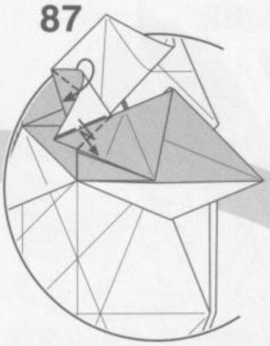
内側の部分を引き出す
Pull out the hidden layer.

86



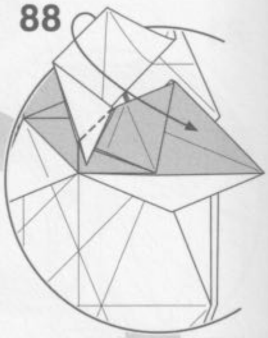
ついている折り筋を
フチに合わせて折りたたむ
Mountain fold the crease and fold it to the edge.

87



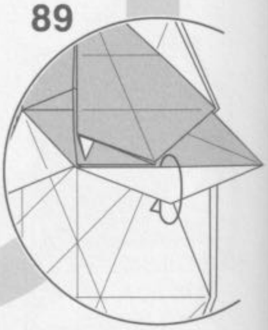
カドをつまんで
フチを合わせて
折りたたむ
Mountain fold along the edge and squash.

88



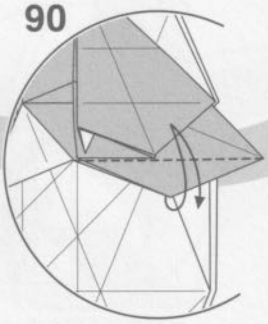
ひろげたフチを戻す
ように折る
Close the layer.

89



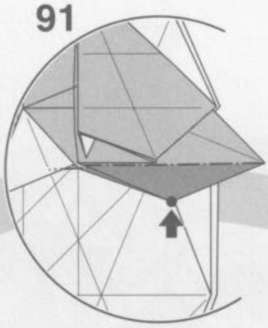
フチを後ろへかぶせる
Wrap to behind around the corner.

90



フチのところで
折り筋をつける
Fold along the edge and unfold.

91



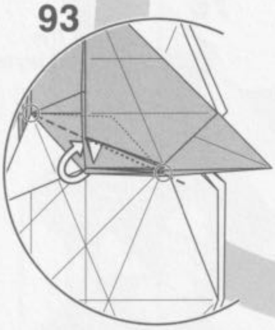
つけた折り筋で
沈め折り（Open sink）
Open sink using the crease.

92



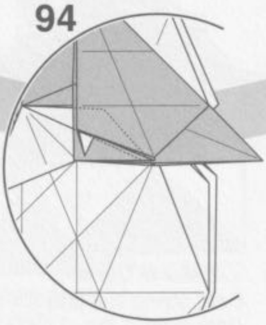
途中の図
In progress...

93

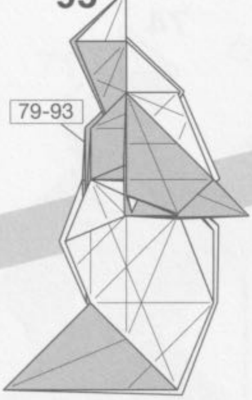


奥のカドを○を結ぶ線で折る
Fold the hidden corner up along the line connecting the circled points.

94

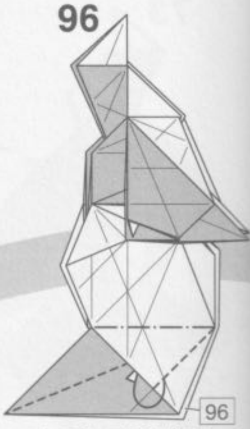


95



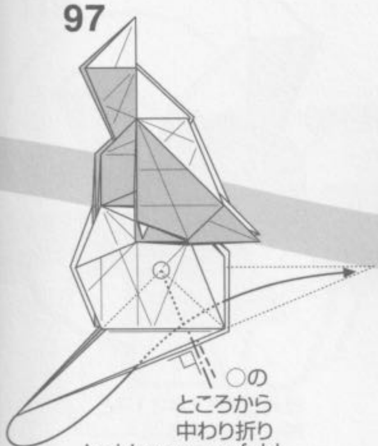
反対側も79-93と
同じように折る
Repeat 79-93 behind.

96



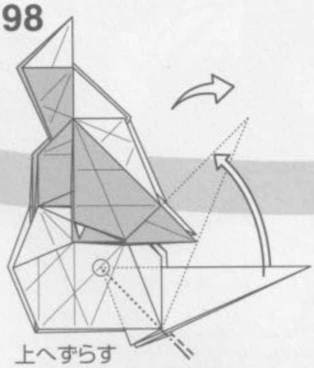
ついている折り筋で
フチを内側に折る
反対側も同じように折る
Swivel fold along the creases. Repeat on the other side.

97



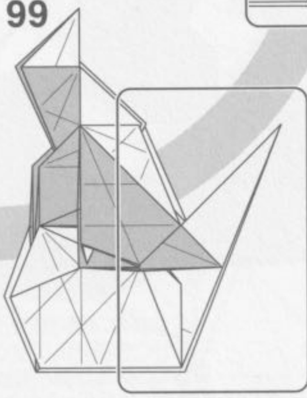
○のところから中わり折り
Inside reverse fold at the circled point.

98



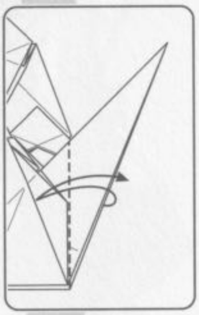
上へずらすように折る
Swivel.

99



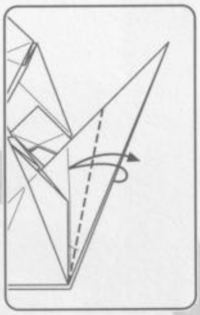
手前の部分を透過する
The next step shows the inner view.

100



フチのところで折り筋をつける
Fold along the edge and unfold.

101



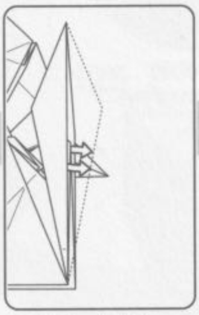
フチをつけた折り筋に合わせて折り筋をつける
Fold the edge to the crease and unfold.

102



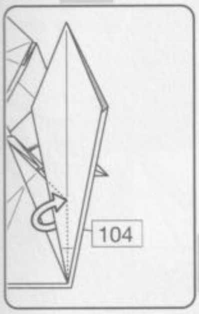
両側でかぶせるように段折り
Pleat on both sides.

103



内側の部分を引き出す
Pull out the hidden layers.

104

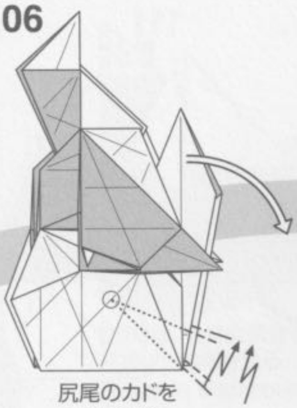


内側のカドを手前に出す
反対側も同じ
Pull out the hidden layer.
Repeat behind.

105

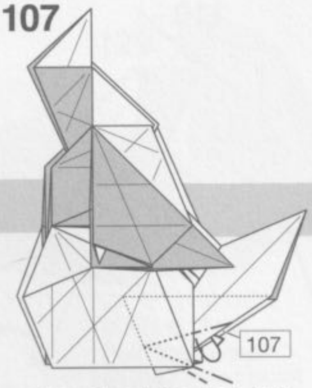


106



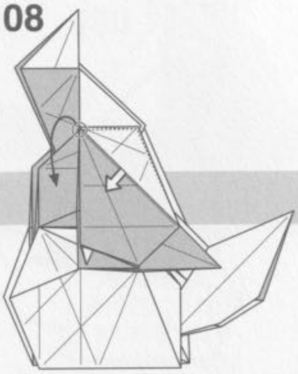
尻尾のカドをついている折り筋を使ってずらすように段折り
Crimp.

107



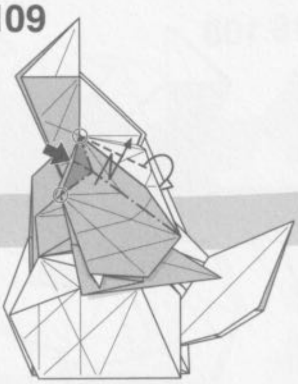
内側に引き寄せるように折る
反対側も同じように折る
Swivel inside.
Repeat on the other side.

108



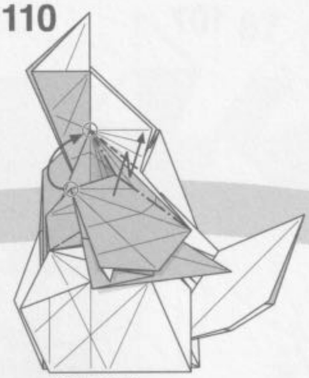
重なっている○の部分を引き出す
Pull out the inner layer.

109



ついている折り筋で
■の部分を押し込みながら
折りたたむ
Push the darkened area
and assemble using the
creases.

110



途中の図
In progress...

111



手前の部分を
かるくひろげる
Open the layer.

112



ついている折り筋で
沈め折り(Open sink)
Open sink using
the creases.

113



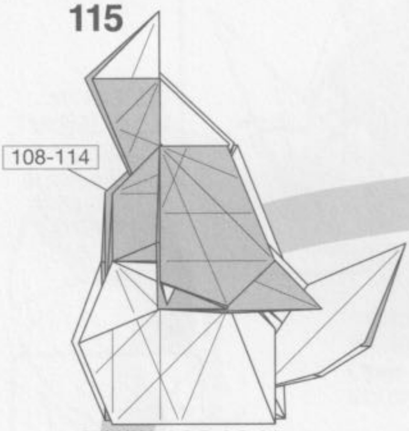
途中の図
In progress...

114



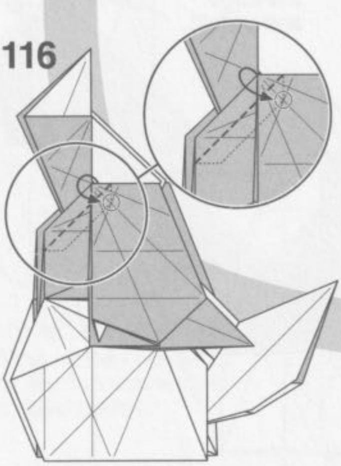
フチを戻す
Close the layer.

115



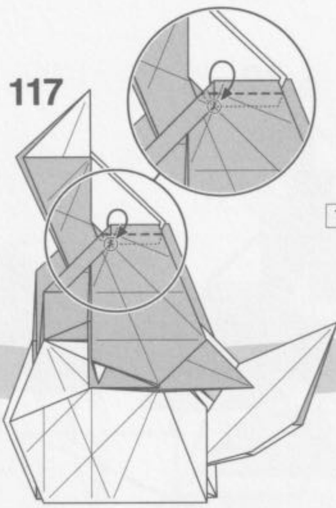
反対側も108-114と
同じように折る
Repeat 108-114
on the other side.

116



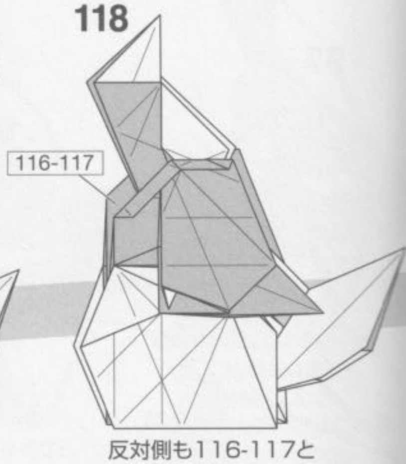
カドを○に合わせて折る
Fold the corner
to the circled point.

117



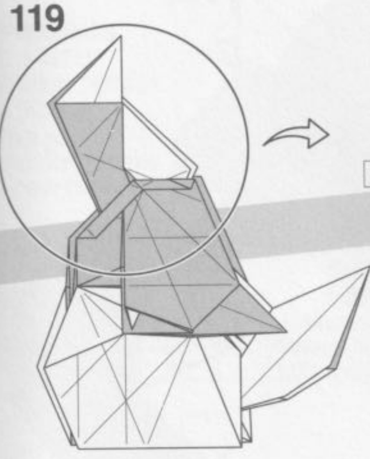
カドを○に合わせて折る
Fold the corner
to the circled point.

118

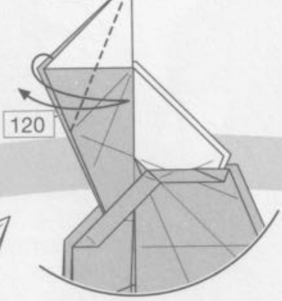


反対側も116-117と
同じように折る
Repeat 116-117
behind.

119

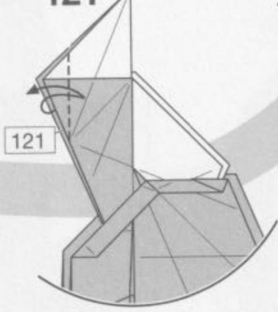


120



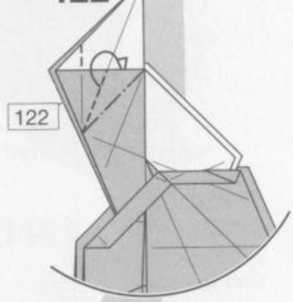
フチとフチを合わせて
折り筋をつける
反対側も同じように折る
Fold edge to edge
and unfold.
Repeat behind.

121



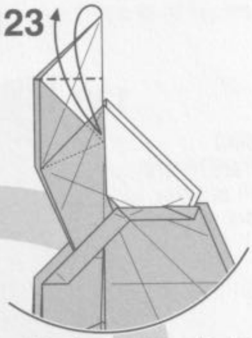
フチを折り筋に合わせて
合わせて折り筋をつける
反対側も同じように折る
Fold the edge to the
crease and unfold.
Repeat behind.

122



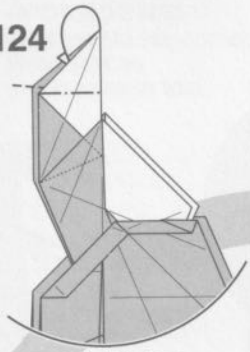
ついている折り筋で
内側に引き寄せる
ように折る
反対側も同じように折る
Swivel inside
using the creases.

123



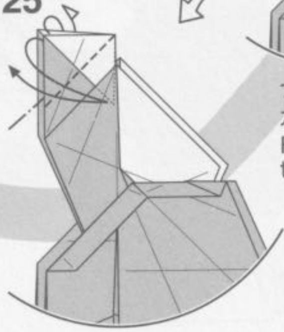
カドのところで下へ折って
折り筋をつける
Fold the corner down
and unfold.

124



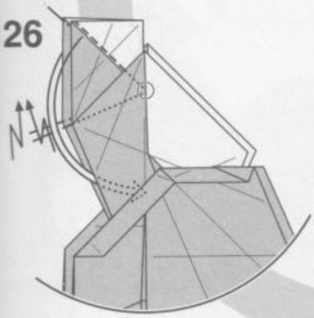
つけた折り筋で
カドを内側に折る
Fold the corner
to inside.

125



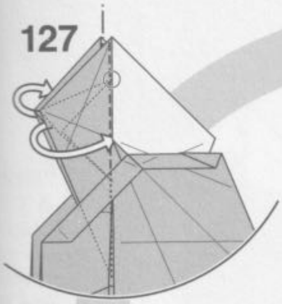
フチとフチを合わせて
折り筋をつける
Fold edge to edge
and unfold.

126



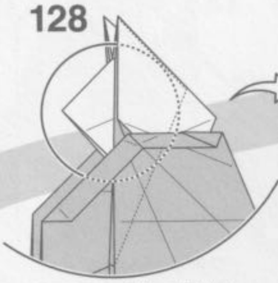
○を支点に内側に
ずらすように折る
Swivel inside.

127



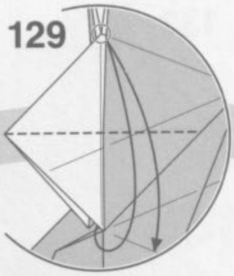
フチのところですき間に
差し込むように折る
Insert the corners
into the slit.

128



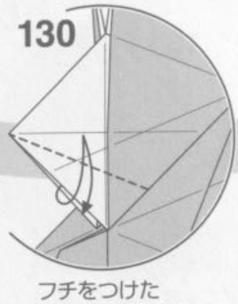
次の図は手前の部分を
透過して内側を見る
The next step shows
the inner view.

129



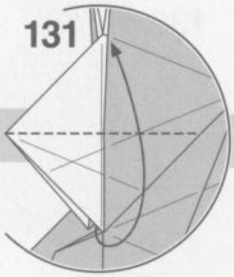
カドを○に合わせて
折り筋をつける
Fold the corner
to the circled point
and unfold.

130



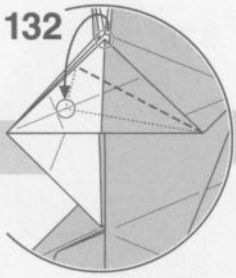
フチをつけた
折り筋に合わせて
折り筋をつける
Fold the edge
to the crease
and unfold.

131



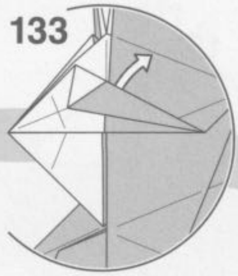
ついている折り筋で
上へ折る
Fold along the crease.

132



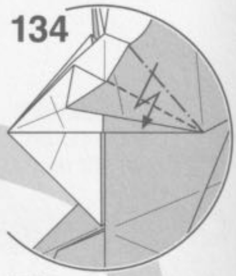
カドを○の折り筋に
合わせて折る
Fold the corner
to the circled point.

133



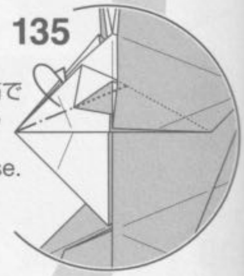
フチを引き出す
Pull out the layer.

134



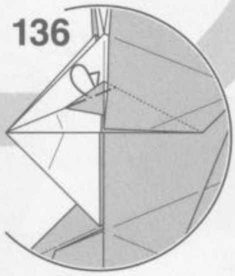
段折りして平らにする
Pleat and flatten.

135



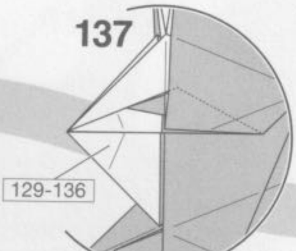
ついている折り筋で
フチを後ろへ折る
Fold behind
along the crease.

136



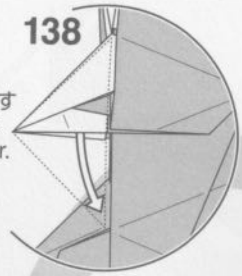
フチのところで
すぐ後ろの
すき間に折る
Mountain fold
along the hidden edge.

137



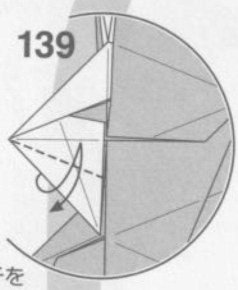
反対側も129-136と
同じように折る
Repeat 129-136
behind.

138



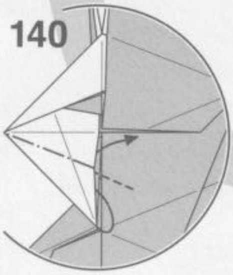
内側の
カドを引き出す
Pull out the
inner corner.

139



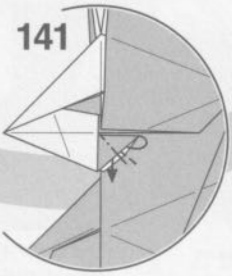
フチを
折り筋に合わせて
折り筋をつける
Fold edge to edge
and unfold.

140



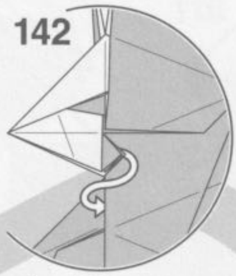
中わり折り
Inside
reverse fold.

141



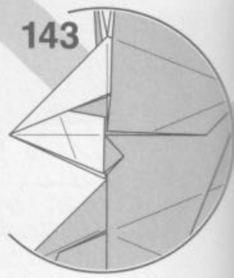
中わり折り
Inside
reverse fold.

142

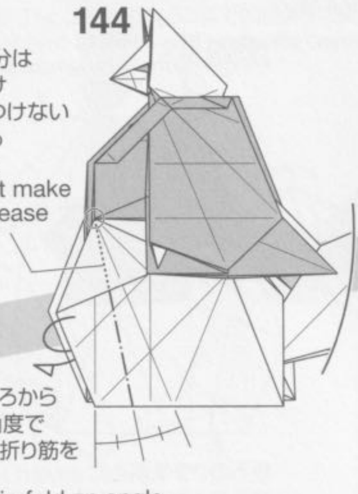


奥のカドをフチの
後ろへ入れ変える
Make the second
top layer the lowest
layer (the other side
of the face).

143



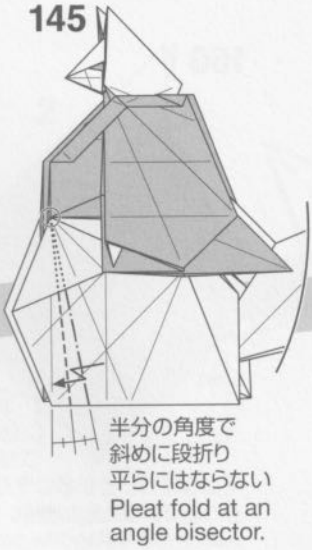
144



手前の部分は
できるだけ
折り筋をつけない
ようにする
This part
shouldn't make
a new crease

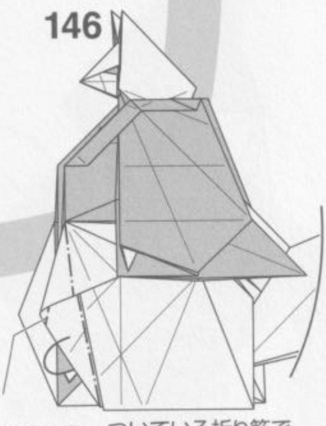
○のところから
半分の角度で
山折りの折り筋を
つける
Mountain fold an angle
bisector and unfold.

145



半分の角度で
斜めに段折り
平らにはならない
Pleat fold at an
angle bisector.

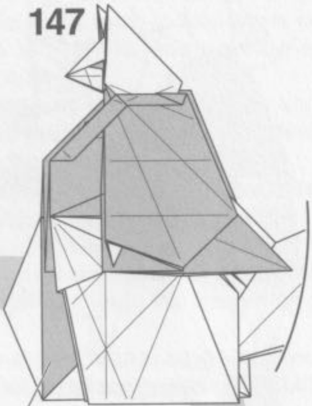
146



ついている
折り筋
existing
crease.

ついている折り筋で
後ろへ折りたたむ
Fold behind
using the creases.

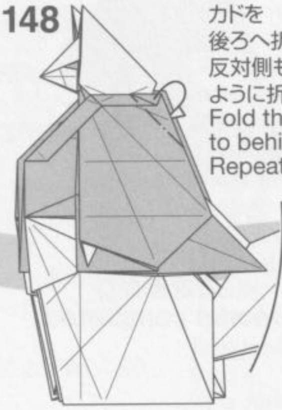
147



144-146

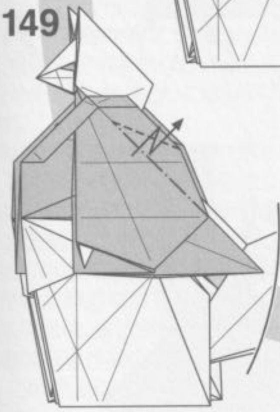
反対側も144-146と
同じように折る
Repeat 144-146
behind.

148



カドを
後ろへ折る
反対側も同じ
ように折る
Fold the corner
to behind.
Repeat behind.

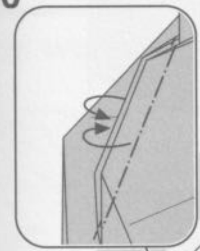
149

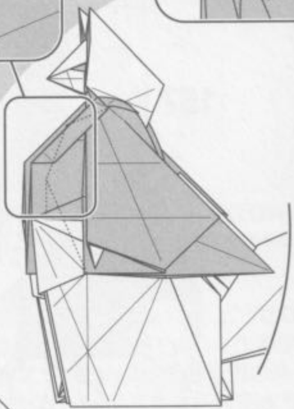


斜めに段折り
立体になる
反対側も同じように折る
Pleat.
Repeat behind.

150

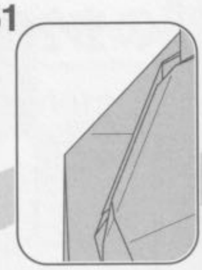
内側を見た図
Inner view.



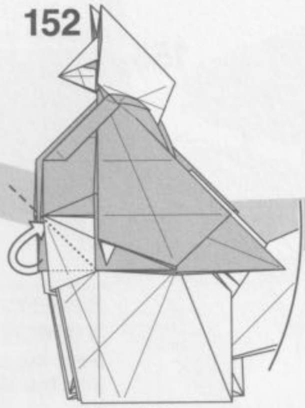


内側のフチを
立てるように折る
Fold the edges
so there is an
overlapping
of layers.

151

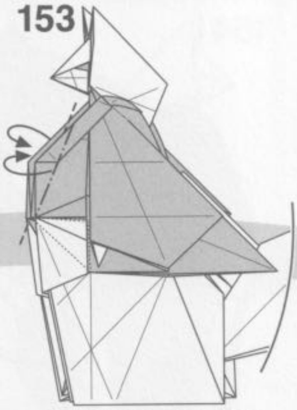


152



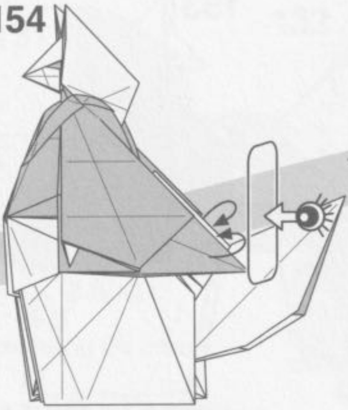
内側のカドを
折って留め折り
(中わり折りではない)
Fold the hidden corner.
Note: Not an
inside reverse fold.

153



カドを立てるように折る
Fold the corners
so there is an
overlapping of layers.

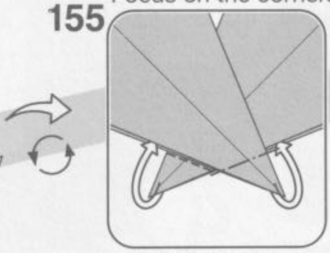
154



カドを曲げて少し重ねる
Bend the flaps
and make them
overlap onto each other.

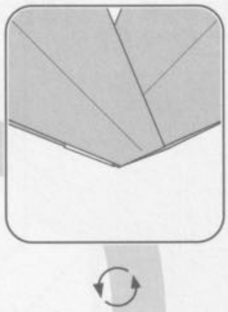
曲げたカドだけ見た図
Focus on the corners.

155

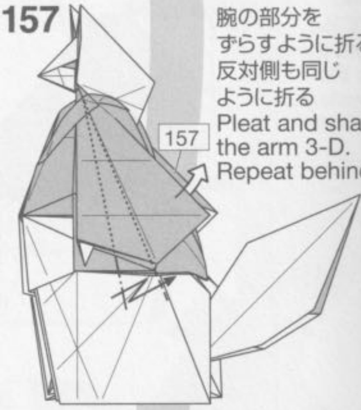


カドをそれぞれ
すき間に折る
Fold the corners
into the slits.

156

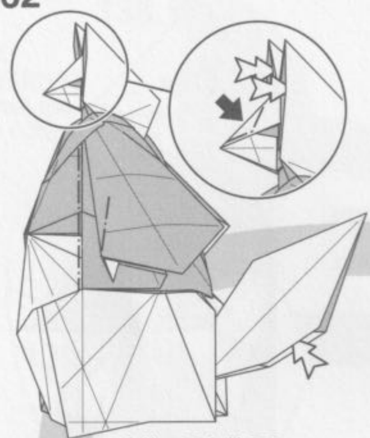


157



腕の部分を
ずらすように折る
反対側も同じ
ように折る
Pleat and shape
the arm 3-D.
Repeat behind.

162



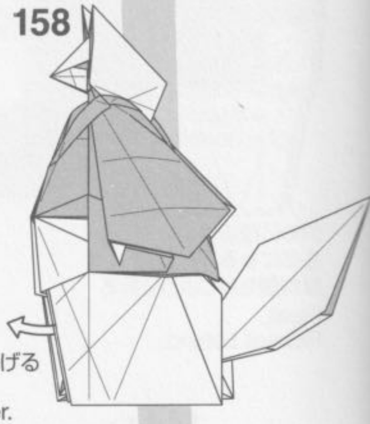
全体の形を整える
Shape the model.

163



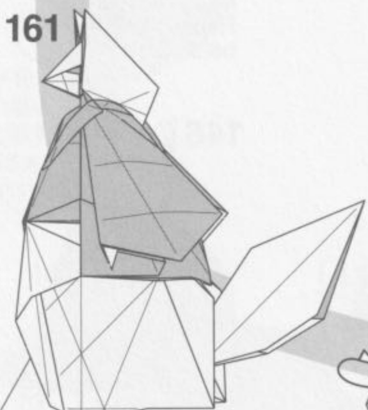
できあがり
Model completed.

158



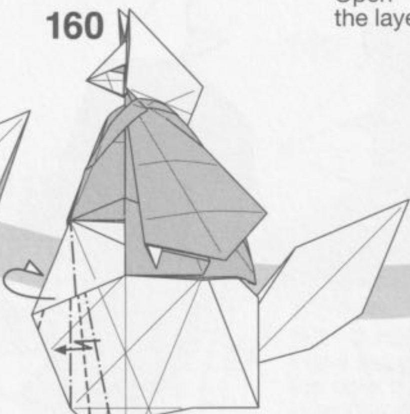
ヒダを
一度ひろげる
Open
the layer.

161



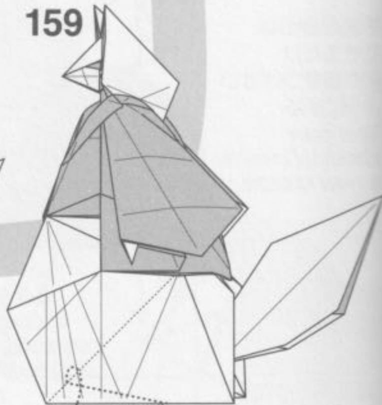
反対側も158-160と
同じように折る
Repeat 158-160
behind.

160



そのままついている
折り筋で折りたたみ直す
Assemble using
the creases.

159

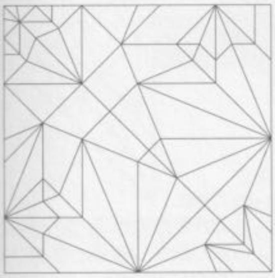


後ろのフチを斜めに
ずらすように引き出す
Pull out the layer.

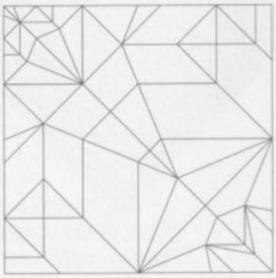
狐の嫁入り - お付きの狐 -

Fox wedding -Retainers-

Created in 2021



[傘持ち]
[Umbrella Bearer]



[提灯持ち]
[Lantern Bearer]



推奨用紙 [傘持ち] 30cm、[提灯持ち] 27cm

狐の嫁入りの花嫁、花婿と制作した後、どうせならこのまま花嫁行列を作ろうと考えました。「行列」を作るからには量産をする可能性を考えて、まずは必要最低限の条件を満たした、複数の従者を折り分けることが可能な基本形を作りました。そのため、作品としては「お付きの狐」とまとめているわけです。

同様の頭部を使えば統一感が出ることは想定していたので、あくまで花嫁と花婿の引き立て役としてのデザインになるよう意識しました。全体的にあっさりと情報量を少なくした他、尾が短いのもその効果を狙ってのことです。

提灯は本作のために創作した作品です。4:3の長方形からの単純な構造なので、前例はあるかもしれません。持ち手の棒は爪楊枝。金具部分は紙と針金で作っています。

傘は伝承作品の「番傘」です。創作しようかとも思いましたが、この作品以上のものが作れる気がしなかったので採用しました。

また、傘持ちは傘を持たせると自立させることが難しいので、台を作るなど工夫してください。

Having made Bride and Groom, I naturally thought that I should make Wedding Processing. As wedding processing may have many retainers, I first designed the base form to fold them out, which is why the models in this section are "Retainers" in the plural form.

The shorter tail and less-detailed designs are to make them "foils" to Bride and Groom. The design of the head makes the whole set coherent.

I designed the lantern from scratch for this model. It is simple in structure from a 4:3 rectangle, so someone might have already designed it. For the handle use a toothpick and you will need a thin piece of sheet and wire to hang the lantern on the handle.

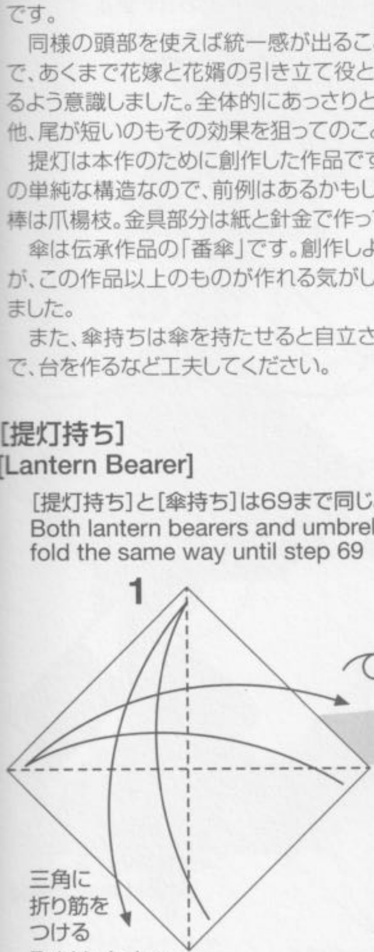
The umbrella is a traditional origami model *Bangasa*. I could not imagine my designing better than it.

It is hard to make the Umbrella Bearer stand by itself, so find your way, like making an umbrella stand.

[提灯持ち]
[Lantern Bearer]

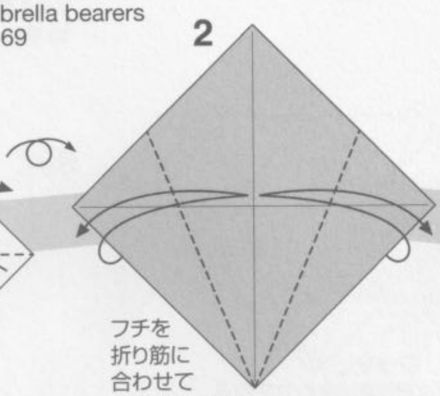
[提灯持ち]と[傘持ち]は69まで同じように折る
Both lantern bearers and umbrella bearers fold the same way until step 69

1



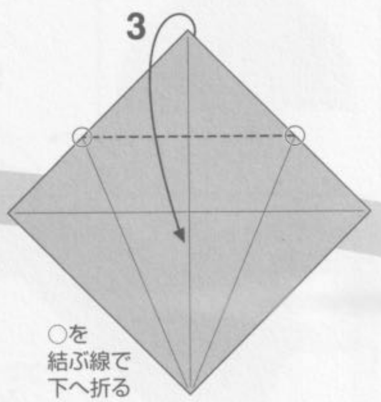
三角に
折り筋を
つける
Fold in halves and unfold.

2

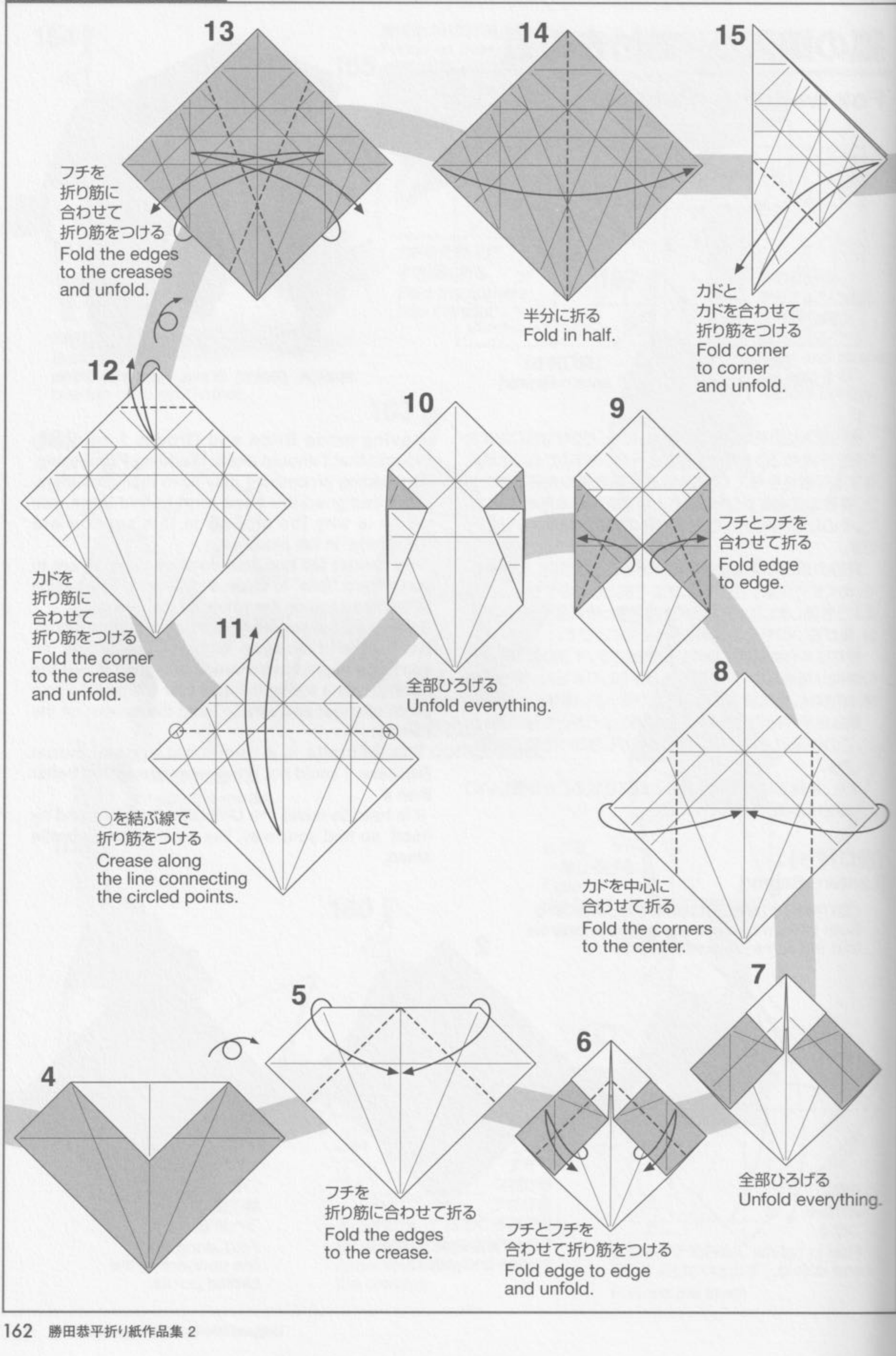


フチを
折り筋に
合わせて
折り筋をつける
Fold the edges to the crease and unfold.

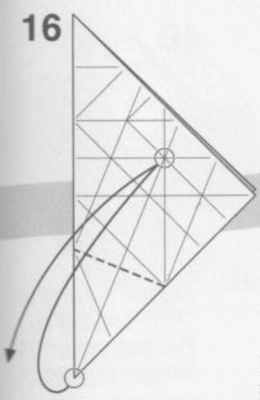
3



○を
結ぶ線で
下へ折る
Fold along the line connecting the circled points.


4
5
フチを
折り筋に合わせて折る
Fold the edges
to the crease.
6
フチとフチを
合わせて折り筋をつける
Fold edge to edge
and unfold.
7
全部ひろげる
Unfold everything.
8
カドを中心に
合わせて折る
Fold the corners
to the center.
9
フチとフチを
合わせて折る
Fold edge
to edge.
10
全部ひろげる
Unfold everything.
11
○を結ぶ線で
折り筋をつける
Crease along
the line connecting
the circled points.
12
カドを
折り筋に
合わせて
折り筋をつける
Fold the corner
to the crease
and unfold.
13
フチを
折り筋に
合わせて
折り筋をつける
Fold the edges
to the creases
and unfold.
14
半分に折る
Fold in half.
15
カドと
カドを合わせて
折り筋をつける
Fold corner
to corner
and unfold.

16



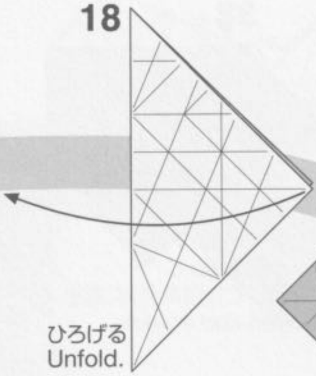
カドを○に合わせて
折り筋をつける
Fold the corner
to the circled point
and unfold.

17



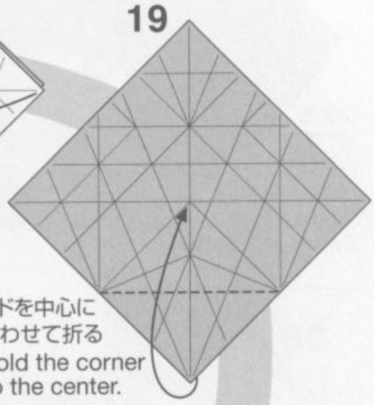
フチを
折り筋に合わせて
折り筋をつける
Fold the edge to the
crease and unfold.

18



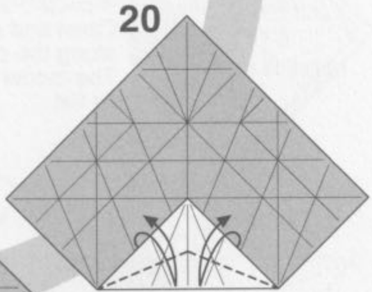
ひろげる
Unfold.

19



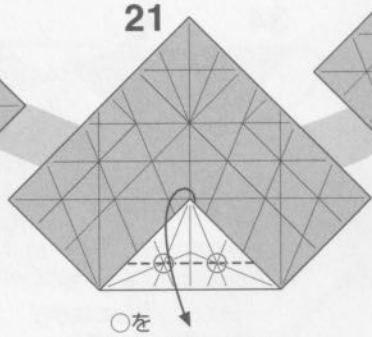
カドを中心に
合わせて折る
Fold the corner
to the center.

20



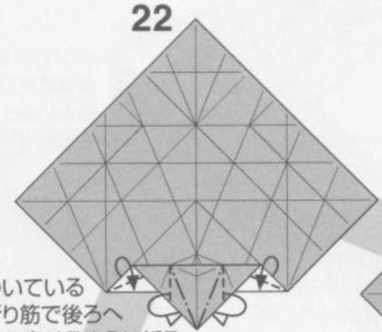
フチとフチを合わせて
折り筋をつける
Fold edge to edge
and unfold.

21



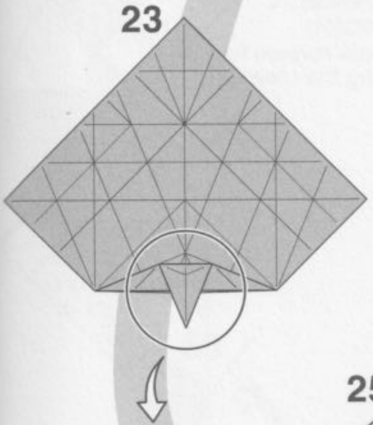
○を
通る線で下へ折る
Fold along the
line connecting
the circled points.

22

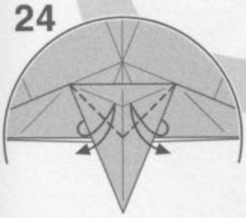


ついている
折り筋で後ろへ
引き寄せるように折る
Swivel inside along
the creases.

23

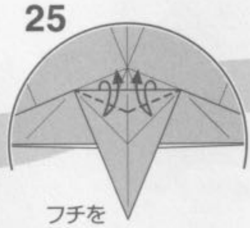


24



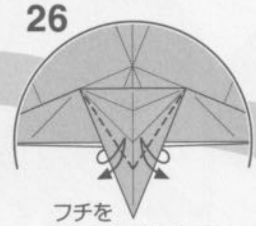
ひらくところで
折り筋をつける
Fold and unfold.

25



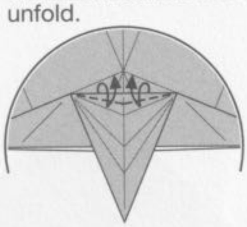
フチを
折り筋に合わせて
折り筋をつける
Fold the edge
to the creases
and unfold.

26



フチを
折り筋に合わせて
折り筋をつける
Fold the edges
to the creases
and unfold.

-傘持ち-を作る場合は更に
フチを折り筋に合わせて
折り筋をつける
To make a
[Lantern bearer],
fold the edge to the
creases in addition and
unfold.

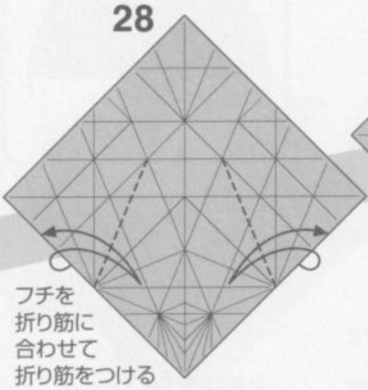


27



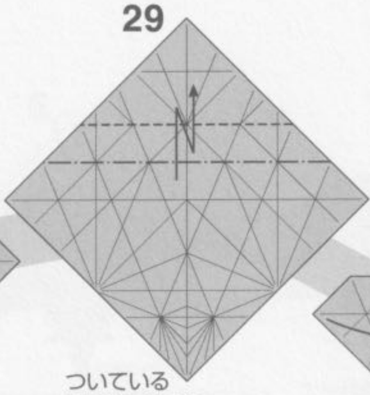
全部ひろげる
Unfold everything.

28



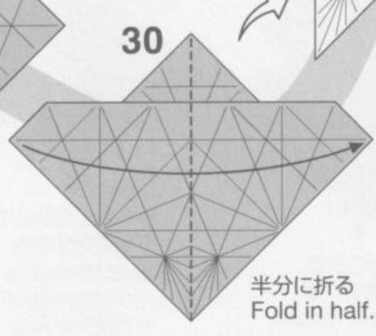
フチを
折り筋に
合わせて
折り筋をつける
Fold the edges to the crease and unfold.

29



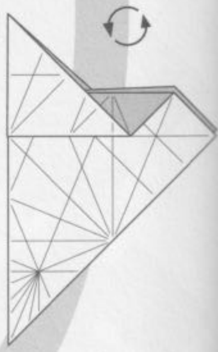
ついている
折り筋で段折り
Pleat along the creases.

30

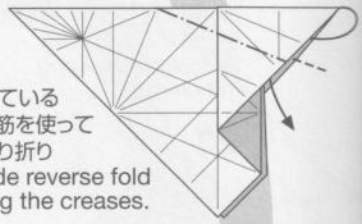


半分に折る
Fold in half.

31

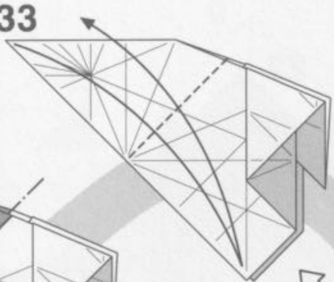


32



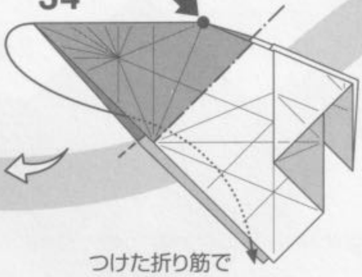
ついている
折り筋を使って
中わり折り
Inside reverse fold using the creases.

33



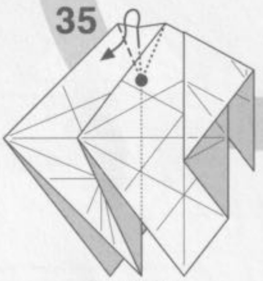
ついている折り筋で
折り筋をつける
Fold and unfold along the crease.

34



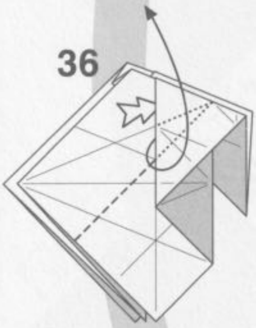
つけた折り筋で
●の部分を沈めながら
しながら中わり折り
Inside reverse fold along the creases while sinking the dotted point.

35



途中の図
In progress...

36



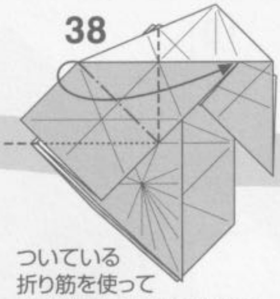
ついている折り筋で
すき間をひろげてつぶす
平らにはらない
Open and squash along the creases. The model will not lie flat.

37



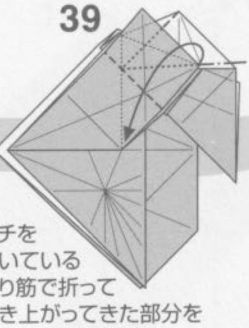
フチを
折り筋に
合わせて
折りたたむ
Fold edge to crease. Swivel and flatten.

38



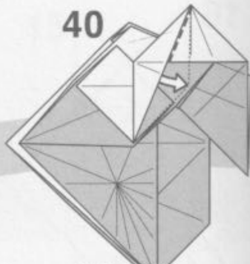
ついている
折り筋を使って
ひろげてつぶすように折る
Open and squash.

39



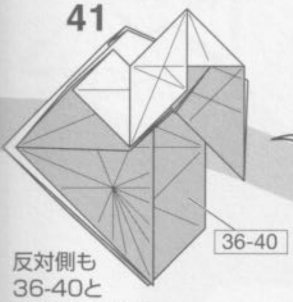
フチを
ついている
折り筋で折って
起き上がってきた部分を
つぶすように折る
Fold the flap down and squash.

40



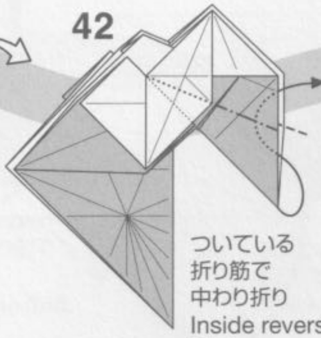
内側の
フチを引き出す
Pull out the hidden corner.

41



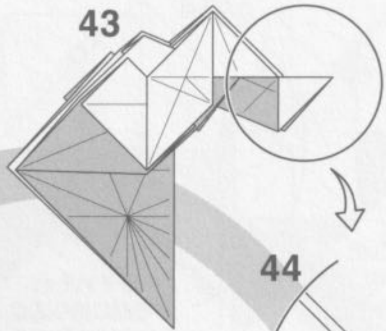
反対側も
36-40と
同じように折る
Repeat 36-40
on the other side.

42

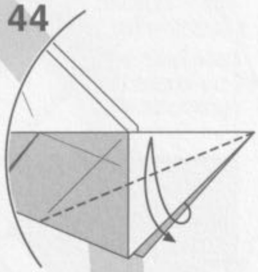


ついている
折り筋で
中わり折り
Inside reverse
fold.

43

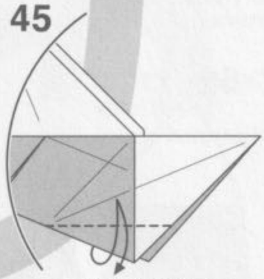


44



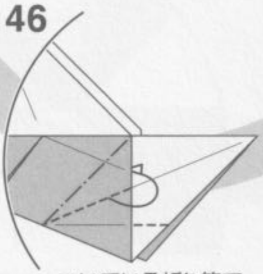
フチとフチを合わせて
折り筋をつける
Fold edge to edge
and unfold.

45



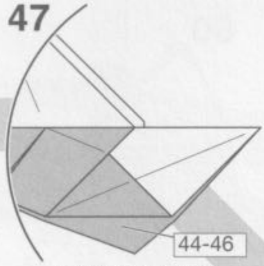
フチを折り筋に
合わせて折り筋を
つける
Fold the edge
to the crease
and unfold.

46



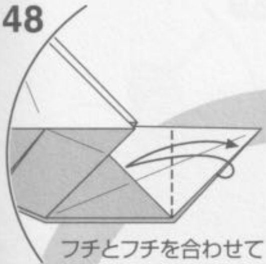
ついている折り筋で
内側に引き寄せる
ように折る
Swivel the edge
to inside using the
creases.

47



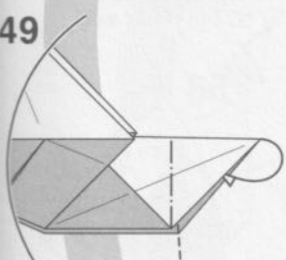
反対側も44-46と
同じように折る
Repeat 44-46
on the other side.

48



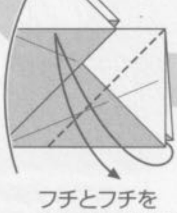
フチとフチを合わせて
折り筋をつける
Fold edge to edge
and unfold.

49



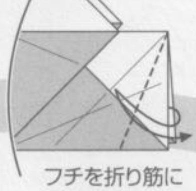
つけた折り筋で
カドを内側に折り込む
Fold the corner
to inside.

50



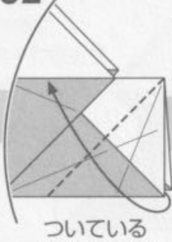
フチとフチを
合わせて折り筋を
つける
Fold edge to edge
and unfold.

51



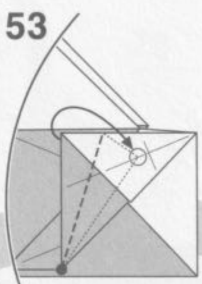
フチを折り筋に
合わせて
折り筋をつける
Fold the edge
to the crease
and unfold.

52



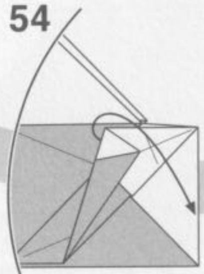
ついている
折り筋で折る
Fold up along
the crease.

53



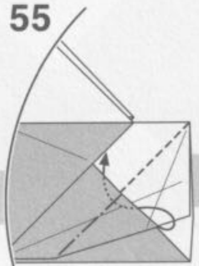
●のところから
カドを折り筋に
合わせて折る
Fold the corner
to the crease.

54



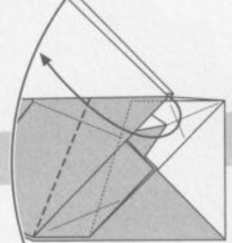
反対側へひろげる
Unfold.

55



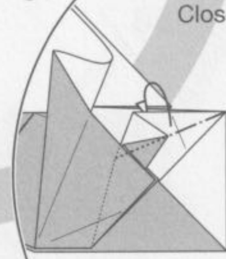
ついている折り筋で
中わり折り
Inside reverse fold.

56



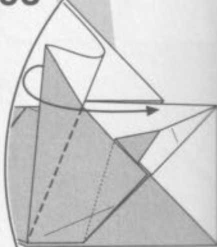
カドを反対側へひろげる
Open the layer.

57



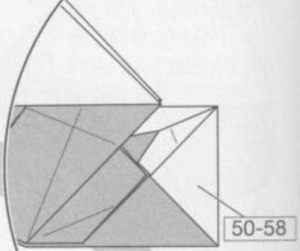
ついている折り筋で
カドを後ろへ折る
Mountain fold
the corner to behind
along the crease.

58



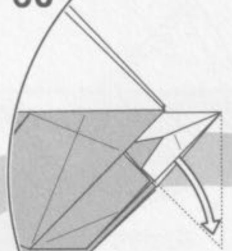
カドを戻す
Close the layer.

59



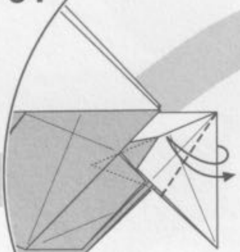
反対側も50-58と
同じように折る
Repeat 50-58
on the other side.

60



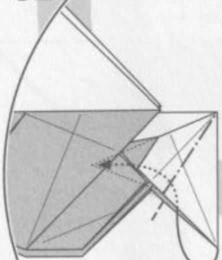
内側のカドを
引き出す
Pull out the
inner layer.

61



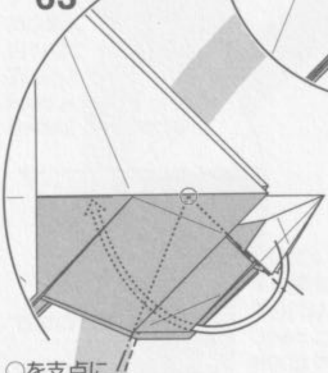
フチとフチを合わせて
折り筋をつける
Fold edge to edge
and unfold.

62



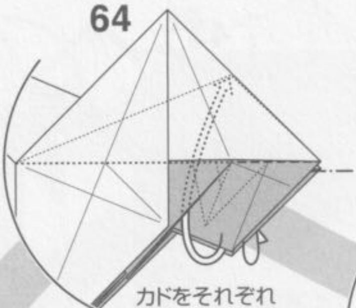
つけた折り筋で
中心のすき間に
中わり折り
Inside reverse fold.

63



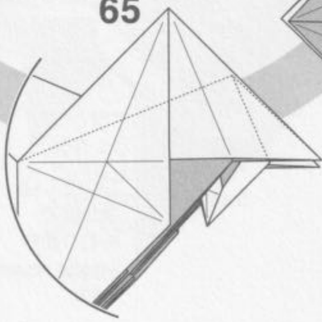
○を支点に
内側にずらすように折る
Crimp the head part
inside.

64

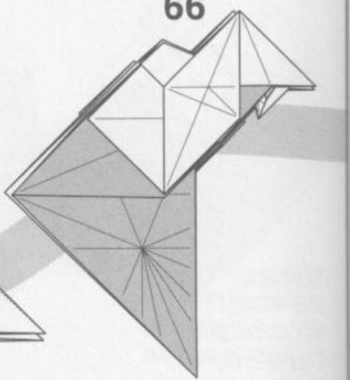


カドをそれぞれ
すき間に折り込む
Fold and insert
the flaps
into the slots.

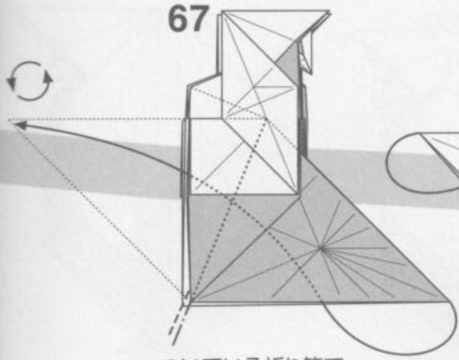
65



66

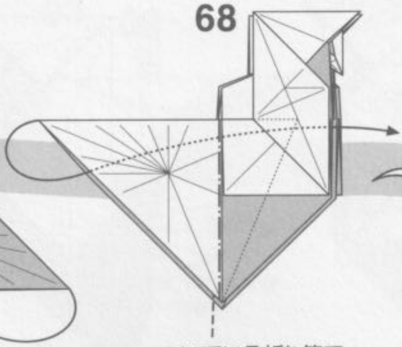


67



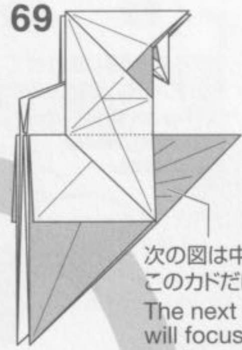
ついている折り筋で
中わり折り
Inside reverse fold.

68



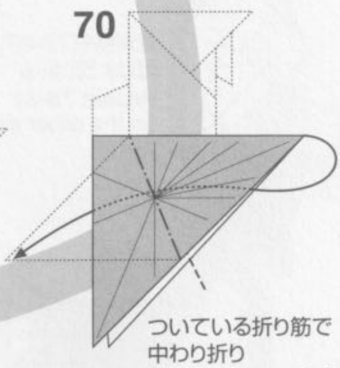
ついている折り筋で
中わり折り
Inside reverse fold.

69



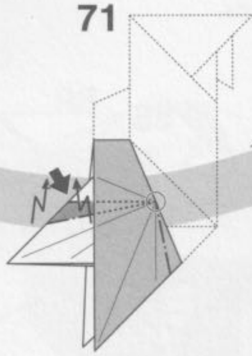
次の図は中心の
このカドだけ見る
The next step
will focus on the
center corner.

70



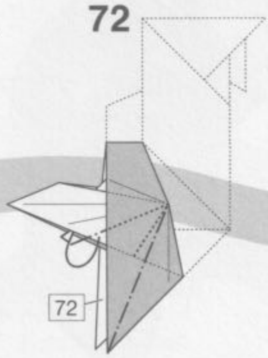
ついている折り筋で
中わり折り
Inside reverse fold.

71



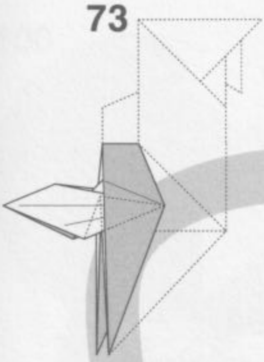
ついている折り筋で
○を支点に両側で段折り
Pleat on both sides
and swivel.

72

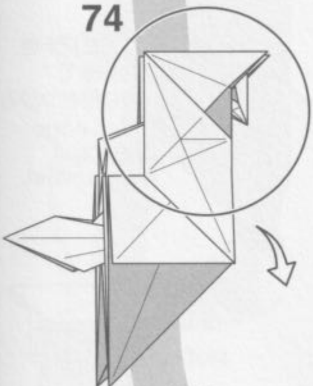


ついている折りを使って
後ろへ引き寄せるように
折る
反対側も同じように折る
Swivel inside using
the creases.
Repeat on the other
side.

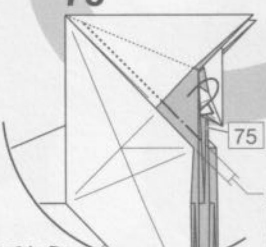
73



74



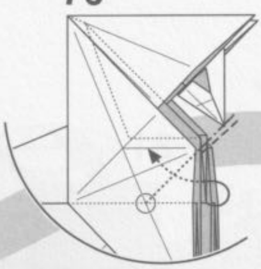
75



少しあける
Leave a
little space
here.

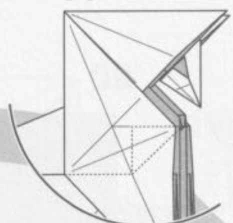
フチから
少しすき間をあけて
カドを後ろへ折る
反対側も同じように折る
Fold the corner inside.
Repeat on the other side.

76

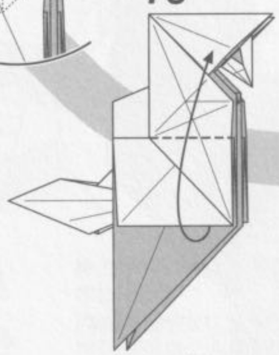


図の位置を目安に
中心のカドを中わり折り
Inside reverse fold
as shown.

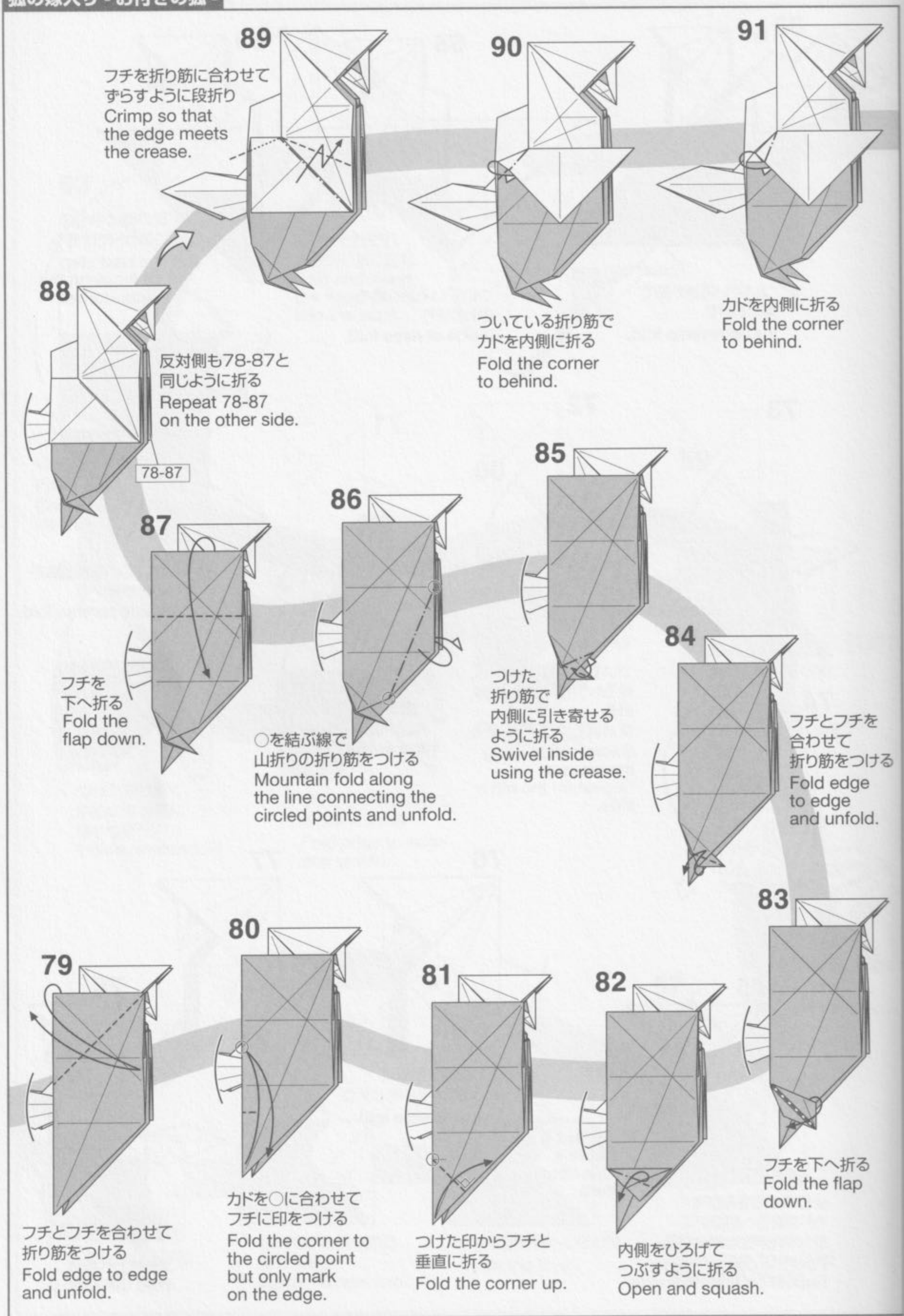
77



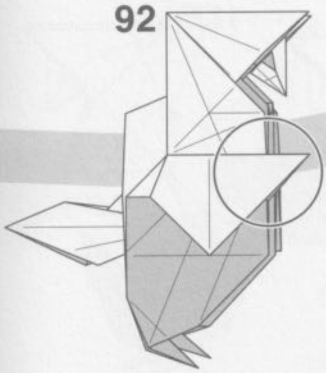
78



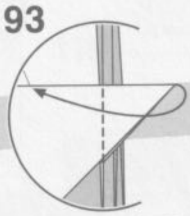
フチを上へ折る
Fold the flap up.


79
フチとフチを合わせて
折り筋をつける
Fold edge to edge
and unfold.
80
カドを○に合わせて
フチに印をつける
Fold the corner to
the circled point
but only mark
on the edge.
81
つけた印からフチと
垂直に折る
Fold the corner up.
82
内側をひろげて
つぶすように折る
Open and squash.
83
フチを下へ折る
Fold the flap
down.
84
フチとフチを
合わせて
折り筋をつける
Fold edge
to edge
and unfold.
85
つけた
折り筋で
内側に引き寄せる
ように折る
Swivel inside
using the crease.
86
○を結ぶ線で
山折りの折り筋をつける
Mountain fold along
the line connecting the
circled points and unfold.
87
フチを
下へ折る
Fold the
flap down.
88
反対側も78-87と
同じように折る
Repeat 78-87
on the other side.
78-87
89
フチを折り筋に合わせて
ずらすように段折り
Crimp so that
the edge meets
the crease.
90
ついている折り筋で
カドを内側に折る
Fold the corner
to behind.
91
カドを内側に折る
Fold the corner
to behind.

92

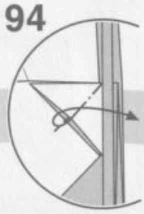


93



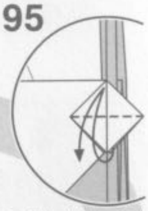
カドをフチのところで
反対側へ折る
Fold the corner along
the hidden edge.

94



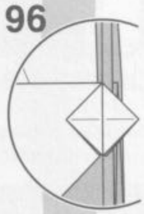
内側をひろげて
つぶすように折る
Open and squash.

95



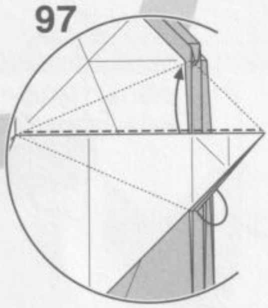
カドとカドを合わせて
折り筋をつける
Fold corner to corner
and unfold.

96



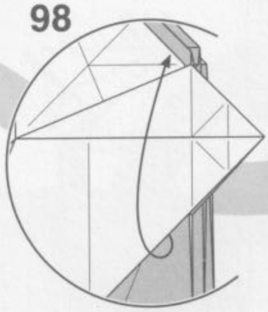
93の形まで戻す
Unfold to 93.

97



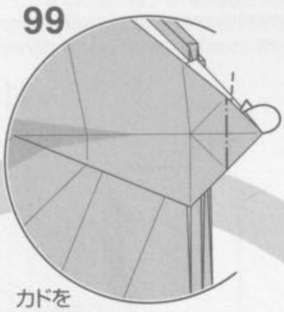
一番内側の1枚だけ
上へ中わり折り
Inside reverse fold
only one layer.

98



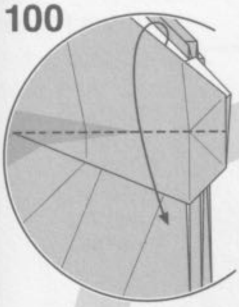
手前の1枚を上へ
かるくひろげる
平らにはならない
Open the layer.
The model will
not lie flat.

99



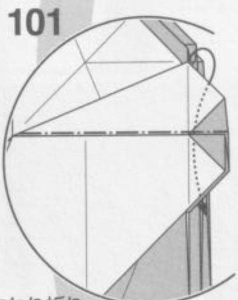
カドを
ついている折り筋で
内側に折り込む
Fold the corner
to inside.

100



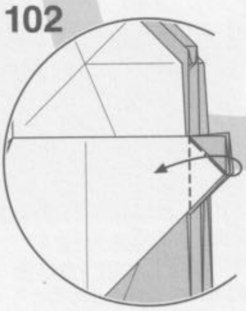
フチを戻す
Close the layer.

101



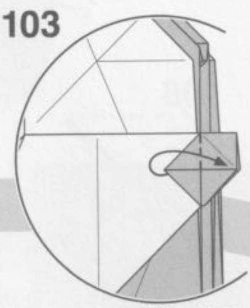
中わり折り
Inside reverse fold.

102



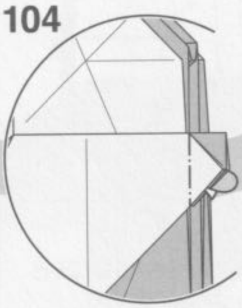
内側をひろげて
つぶすように折る
Open and squash.

103



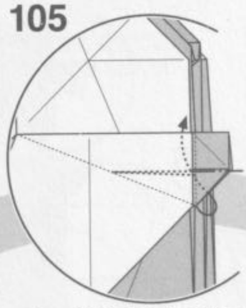
カドを反対側へ折る
Fold the flap
to the other side.

104



手前のカドを内側に折る
Fold the corner
to inside.

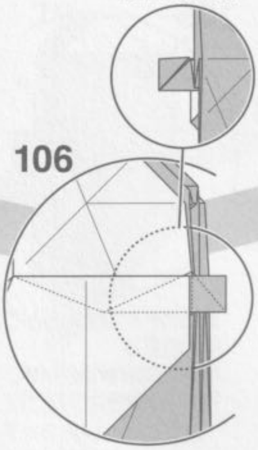
105



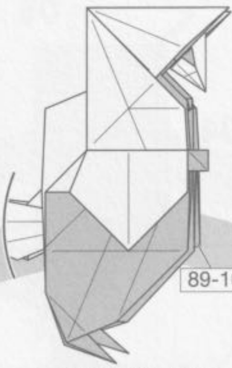
奥のカドを2枚まとめて
中わり折り
Inside reverse fold
two layers.

106

裏から見た図
Back view.

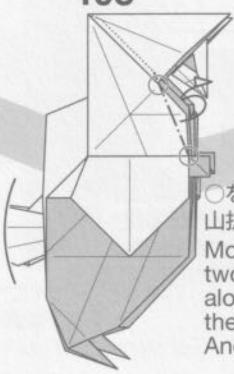


107



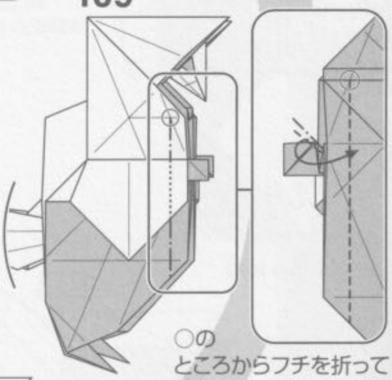
反対側も89-105と
同じように折る
Repeat 89-105
on the other side.

108



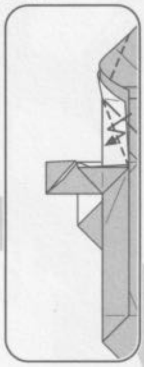
○を結ぶ線で2枚まとめて
山折りの折り筋をつける
Mountain fold the
two layers together
along the line connecting
the circled points.
And unfold.

109



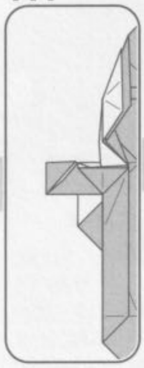
○の
ところからフチを折って
起き上がってきた部分を
つぶすように折る
Fold the edge at the
circled point and squash.

110

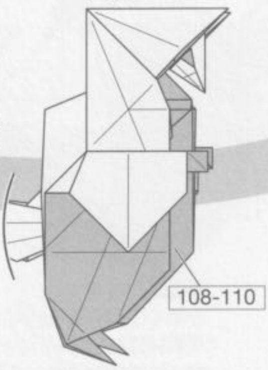


ついている
折り筋で
折りたたむ
Assemble
using the
creases.

111

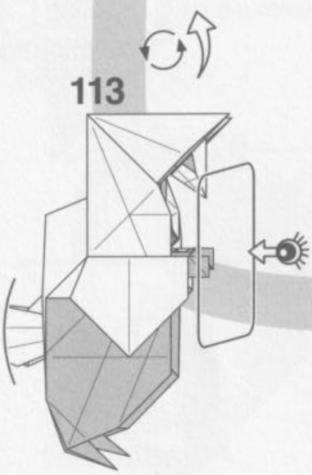


112



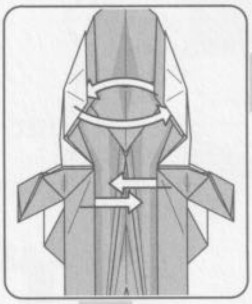
反対側も108-110と
同じように折る
Repeat 108-110
on the other side.

113



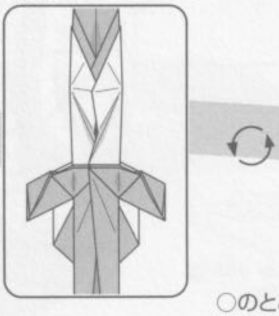
次の図は正面から見る
The following steps
show the front view.

114

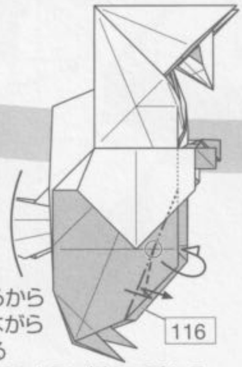


フチを噛み合わせる
ように重ねる
Make the layers
overlap with each other.

115

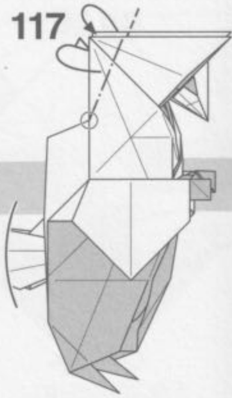


116



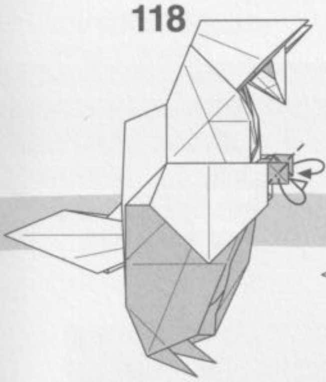
○のところから
段折りしながら
フチを折る
反対側も同じように折って重ねる
Fold the edge to behind and
pleat from the circled point.
Repeat behind and make the l
ayers overlap with each other.

117



○のところから
内側に折る
Fold the corners
to inside.

118



カドを内側に折る
Fold the corners to inside.

119

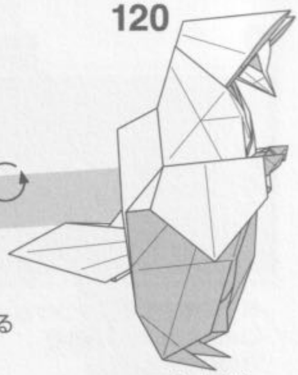
耳のカドをひろげる
Open the layers.



フチを押し込んで顔を立体的にする
Push and shape the face.

○を支点にカドをずらして自立するように角度を調整する
Crimp the corners a little at the circled point to make the model self-standing.

120

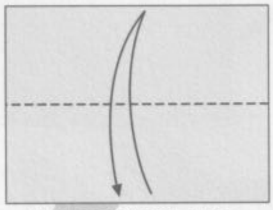


できあがり
Completed.

[提灯]
[Paper Lantern]

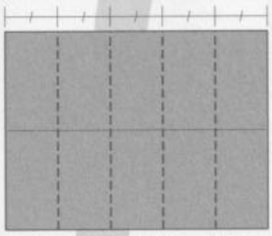
4:3の比率の紙を使う
Use a 4-by-3 ratio paper.

1



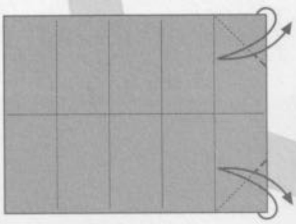
半分に折り筋をつける
Fold in half and unfold.

2



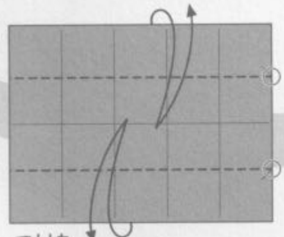
5等分の折り筋をつける
Crease at fifths of the width.

3



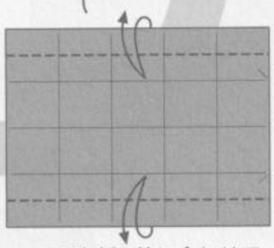
フチを折り筋に合わせて印をつける
Fold the edge to the crease, but only mark on the edge. Unfold.

4



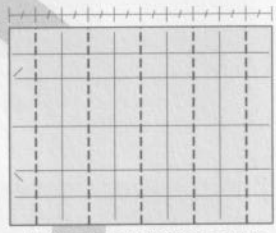
つけた印のところで折り筋をつける
Fold and unfold at the circled points.

5



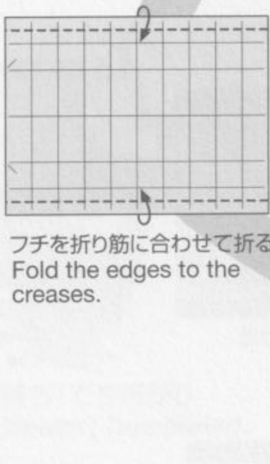
フチを折り筋に合わせて折り筋をつける
Fold the edges to the creases and unfold.

6



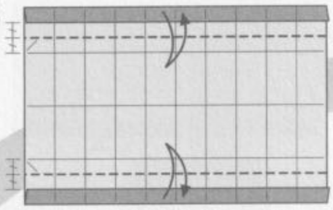
半分の幅で折り筋をつける
Crease at the half of the width.

7



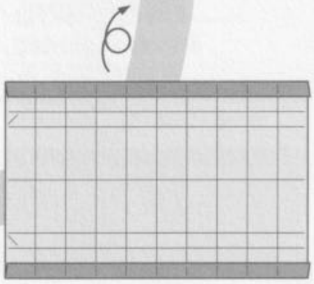
フチを折り筋に合わせて折る
Fold the edges to the creases.

8

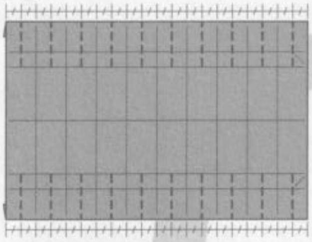


半分の幅で折り筋をつける
Crease at the half of the width.

9

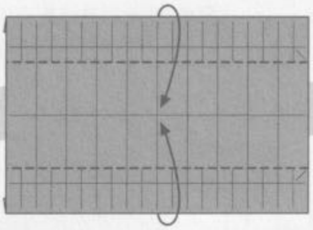


10



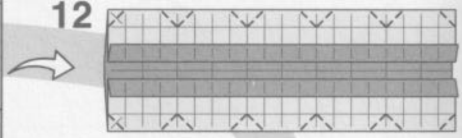
半分の幅で折り筋をつける
Crease at the half of the width.

11



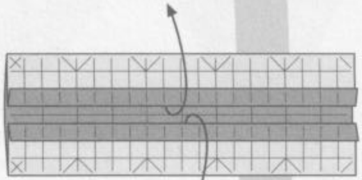
フチをついている折り筋で折る
Fold along the creases.

12



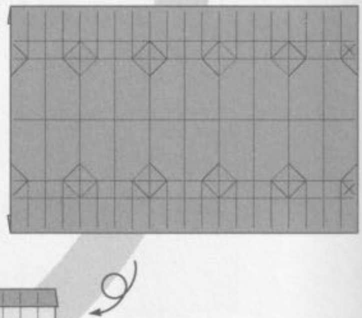
斜めに折り筋をつける
Fold and unfold.

13

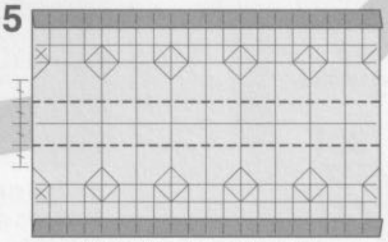


フチをひろげる
Open the layers.

14

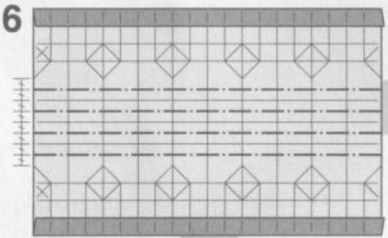


15



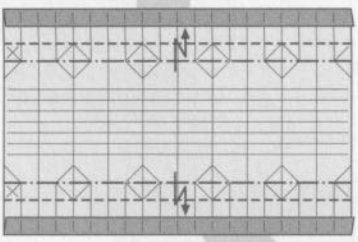
半分の幅で折り筋をつける
Crease at the half of the width.

16



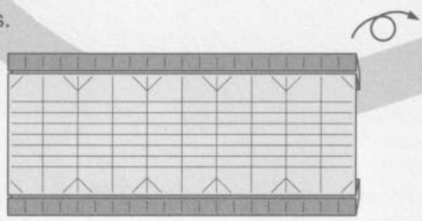
半分の幅で折り筋をつける
Crease at the half of the width.

17

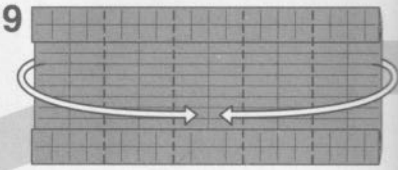


ついている折り筋で段折り
Pleat along the creases.

18

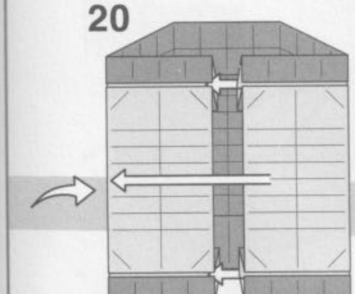


19



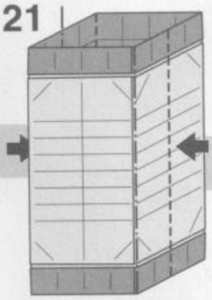
ついている折り筋でフチを起こす
Raise the edges along the creases.

20



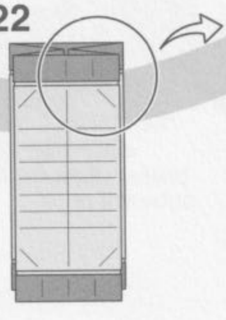
片方のフチを反対側のすき間に差し込みながら重ねる
Insert the edge into the slit on the other side.

21

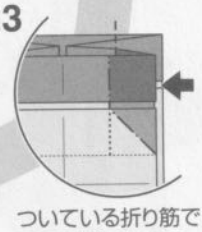


ついている折り筋で平らに折りたたむ
Flatten the model.

22

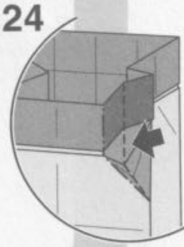


23



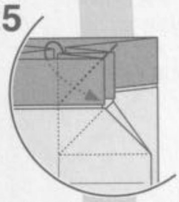
ついている折り筋でフチを押し込んで折りたたむ
Push the darkened part to inside using the creases.

24



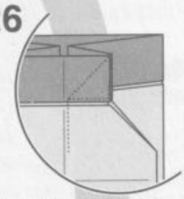
途中の図
In progress...

25



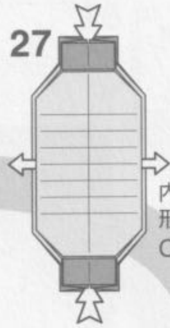
内側に押し込んだカドを斜めに折る(留め折り)
Fold the inner corner to lock.

26



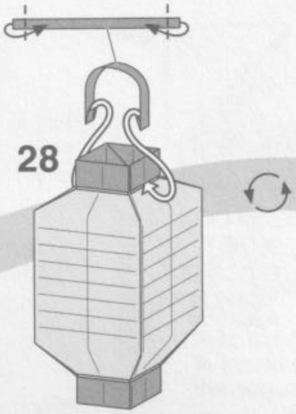
残りも同じように折る
Repeat 23-25 on the other corners.

27

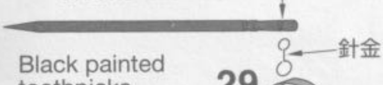


内側をひろげて形を整える
Open the model.

28

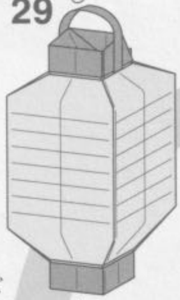


細長い紙の先を少し折って提灯のすき間に差し込む
Fold ends of the narrow piece of paper. And insert it into the slot of the lantern.



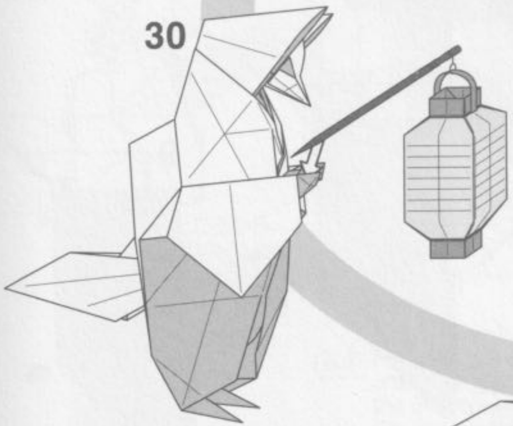
Black painted toothpicks.
黒く塗った爪楊枝

29



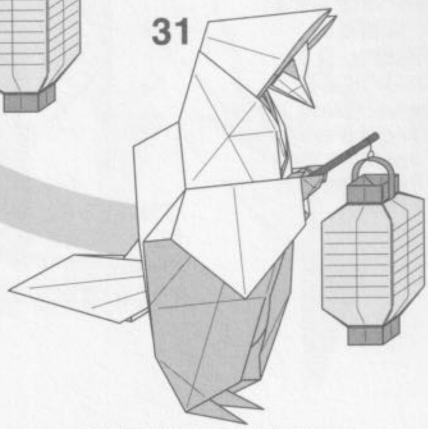
針金を図のような形に曲げて持ち手と提灯をつなぐ
Bend the wire as shown to make the lantern hung down from the handle.

30



提灯の持ち手をすき間に差し込んでのりづけ
Insert and glue the handle of the lantern.

31

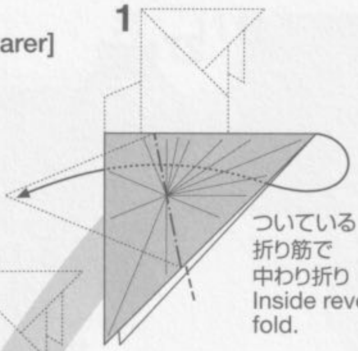


[提灯持ち]できあがり
[Lantern Bearer] Completed.

[傘持ち]
[Umbrella Bearer]

[提灯持ち]の
70から始める

1



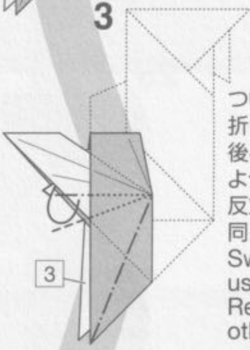
ついている
折り筋で
中わり折り
Inside reverse
fold.

2



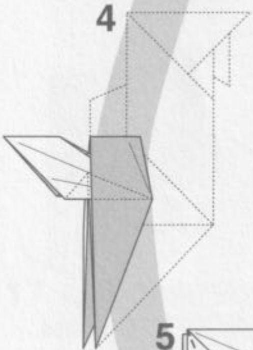
ついている折り筋で
○を支点に両側で段折り
Pleat on both sides
and swivel.

3

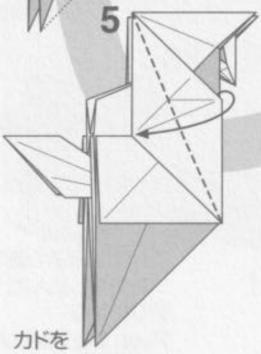


ついている
折りを使って
後ろへ引き寄せる
ように折る
反対側も
同じように折る
Swivel inside
using the creases.
Repeat on the
other side.

4

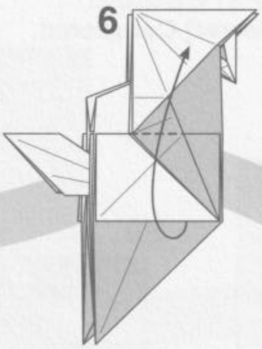


5



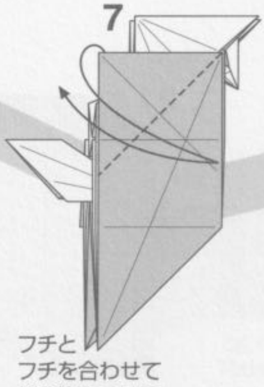
カドを
反対側へ折る
Fold the flap
to the other side.

6



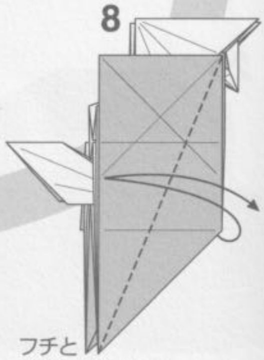
フチを上へ折る
Fold the flap up.

7



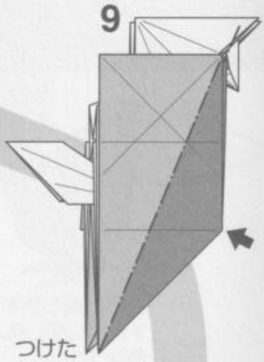
フチと
フチを合わせて
折り筋をつける
Fold edge to edge
and unfold.

8



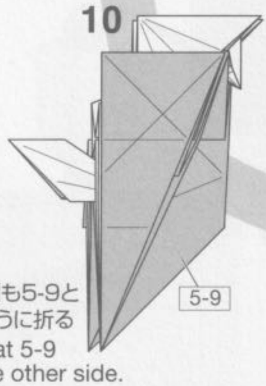
フチと
フチを合わせて
折り筋をつけ直す
Fold edge to edge
along the crease
and unfold.

9



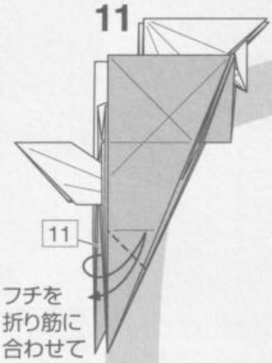
つけた
折り筋で沈め折り
(Open sink)
Open sink
along the creases.

10



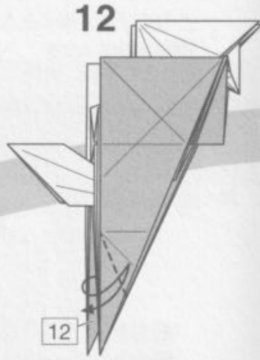
反対側も5-9と
同じように折る
Repeat 5-9
on the other side.

11



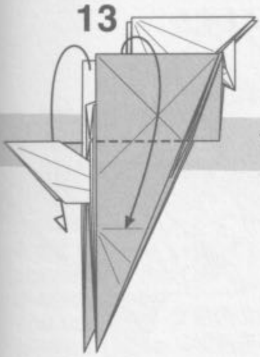
フチを
折り筋に
合わせて
折り筋をつける
反対側も同じように折る
Fold the edge to the
crease and unfold.
Repeat on the other
side.

12



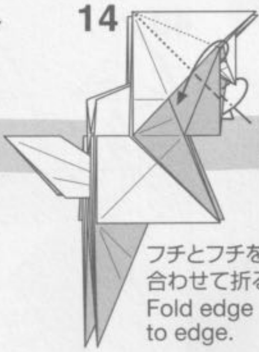
フチをつけた折り筋に
合わせて折り筋をつける
反対側も同じように折る
Fold the edge to the
crease and unfold.
Repeat on the
other side.

13



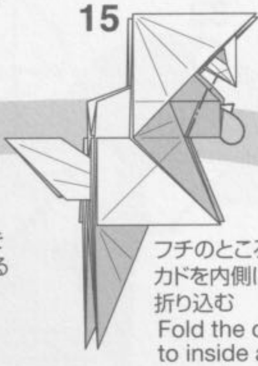
フチを下へ折る
Fold the flaps down.

14



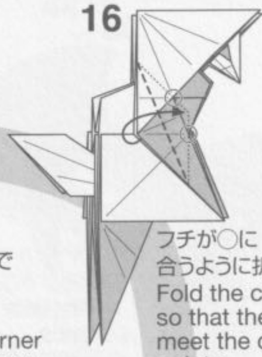
フチとフチを
合わせて折る
Fold edge to edge.

15



フチのところで
カドを内側に
折り込む
Fold the corner to inside along the edges.

16



フチが◯に
合うように折る
Fold the corner so that the edges meet the circled points.

17



カドをすき間に
差し込みながら
フチを反対側へ
折る
Fold the layers to the other side so that the tip will be into the slit.

18



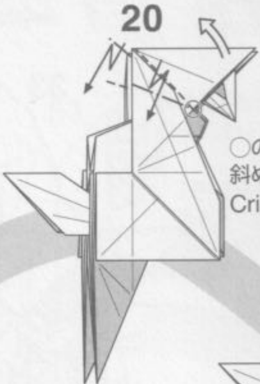
反対側も16-17と
同じように折る
Repeat 16-17 on the other side.

19



◯を結ぶ線で
折り筋をつける
反対側も
同じように折る
Fold and unfold along the line connecting the circled points. Repeat on the other side.

20



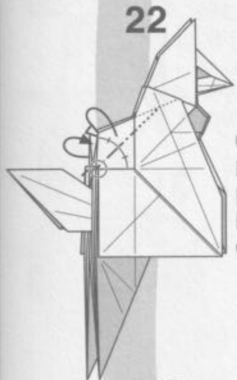
◯のところから
斜めに段折り
Crimp.

21



◯のところから
内側に折り込む
Fold the layers to inside at the circled point.

22



◯のところから
内側に折り込む
Fold the layers inside at the circled point.

23



半分の角度で
ずらすように段折り
Crimp at an angle bisector.

24



◯を結ぶ線を
使って斜めに段折り
立体になる
Pleat using the line connecting the circled points. The model does not lie flat.

25

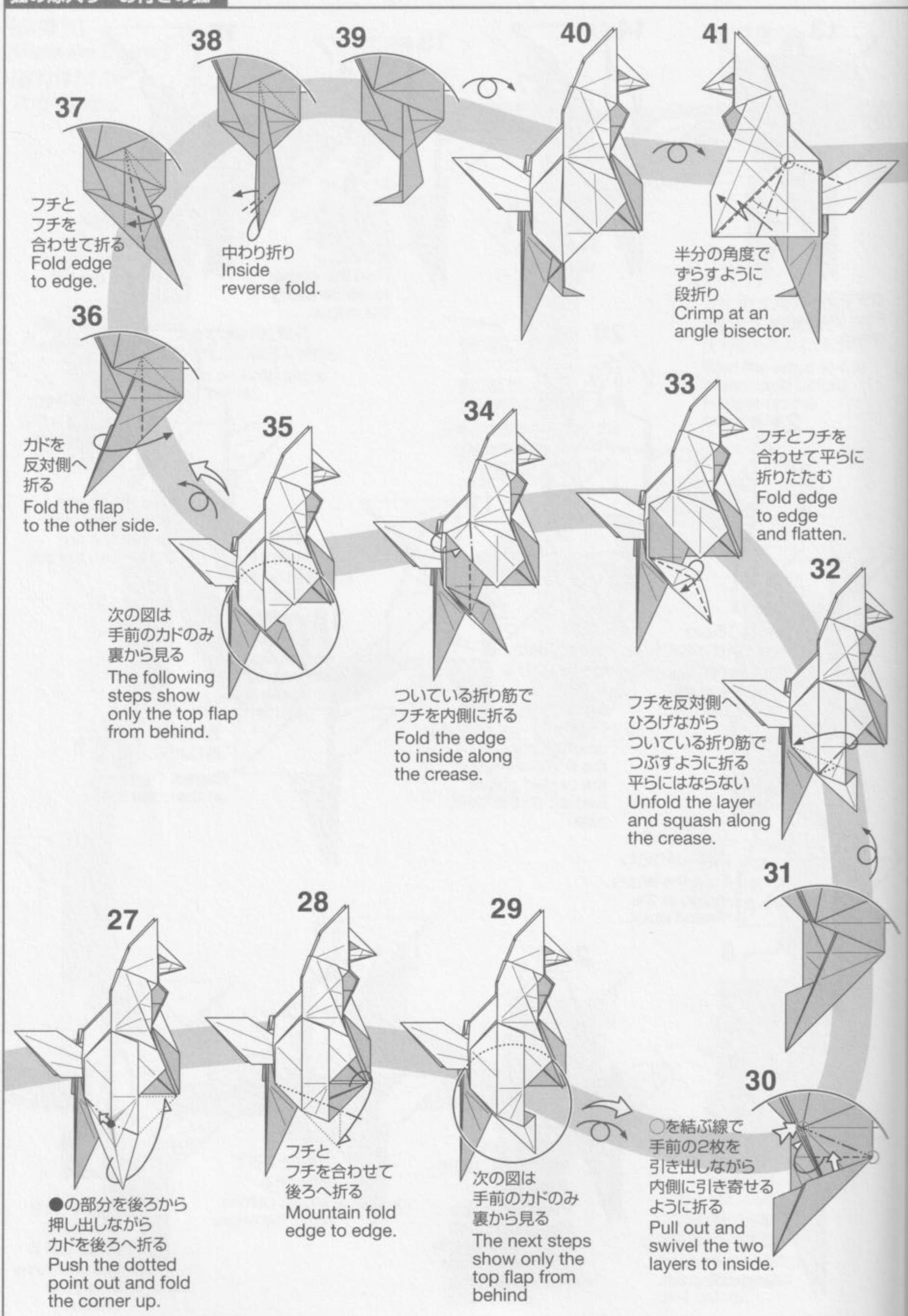


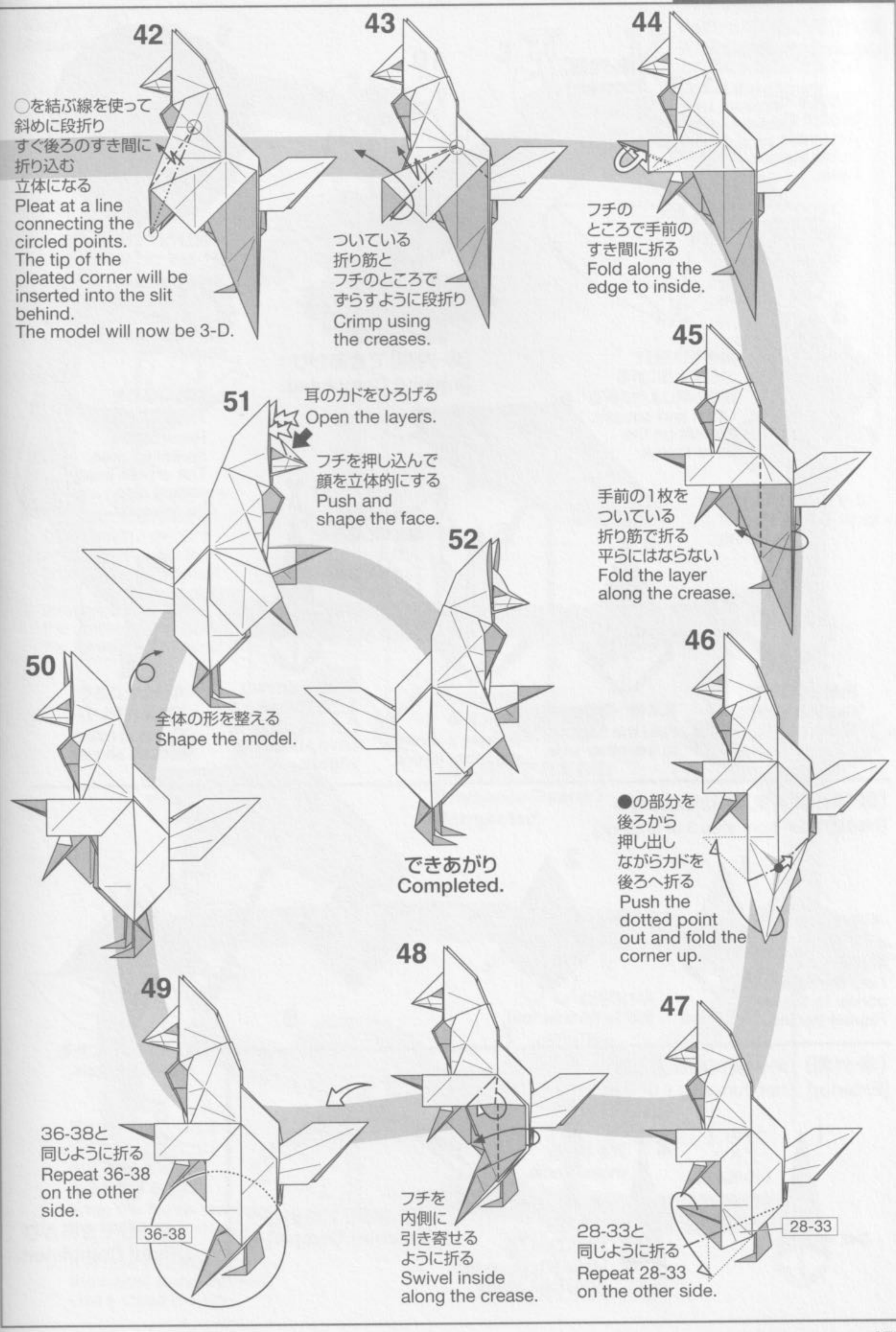
フチのところで
後ろへ折る
Fold to behind along the edge.

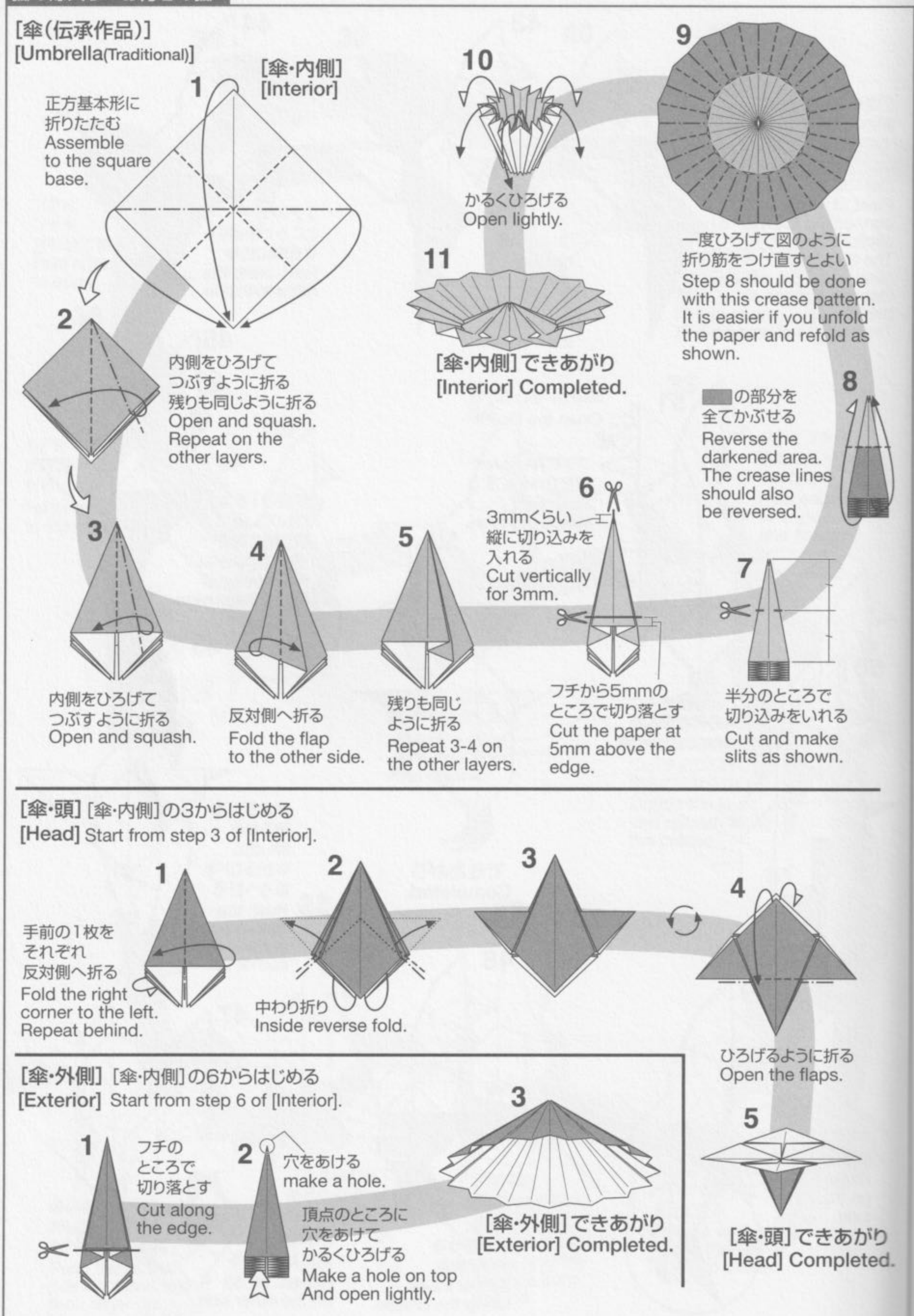
26



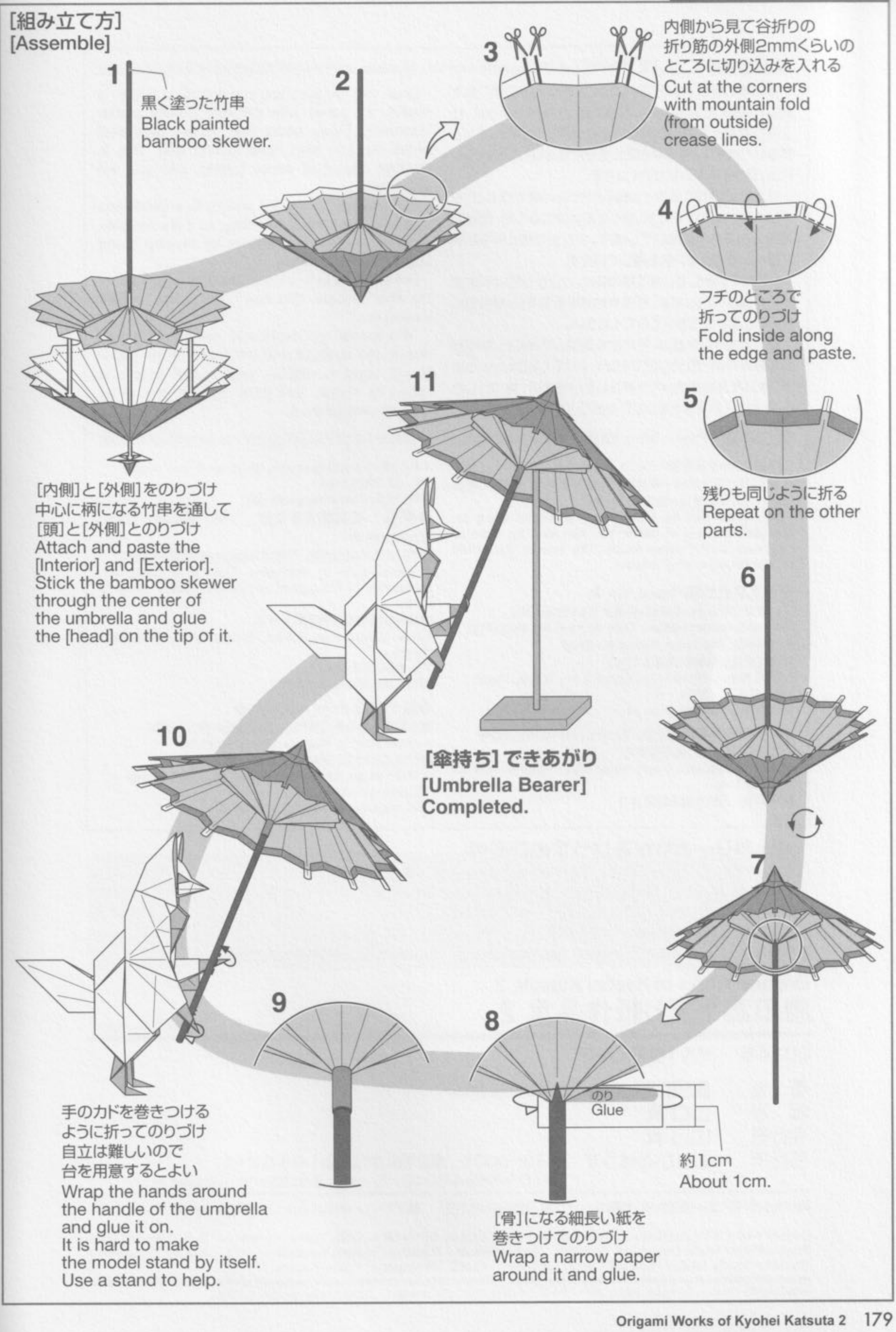
手前の1枚を
ついている
折り筋で折る
Fold the layer along the crease.


27
●の部分を後ろから
押し出しながら
カドを後ろへ折る
Push the dotted
point out and fold
the corner up.
28
フチと
フチを合わせて
後ろへ折る
Mountain fold
edge to edge.
29
次の図は
手前のカドのみ
裏から見る
The next steps
show only the
top flap from
behind
30
○を結ぶ線で
手前の2枚を
引き出しながら
内側に引き寄せる
ように折る
Pull out and
swivel the two
layers to inside.
31
32
フチを反対側へ
ひろげながら
ついている折り筋で
つぶすように折る
平らにはならない
Unfold the layer
and squash along
the crease.
33
フチとフチを
合わせて平らに
折りたたむ
Fold edge
to edge
and flatten.
34
ついている折り筋で
フチを内側に折る
Fold the edge
to inside along
the crease.
35
次の図は
手前のカドのみ
裏から見る
The following
steps show
only the top flap
from behind.
36
カドを
反対側へ
折る
Fold the flap
to the other side.
37
フチと
フチを
合わせて折る
Fold edge
to edge.
38
中わり折り
Inside
reverse fold.
39
40
41
半分の角度で
ずらすように
段折り
Crimp at an
angle bisector.


42
○を結ぶ線を使って
斜めに段折り
すぐ後ろのすき間に
折り込む
立体になる
Pleat at a line connecting the circled points.
The tip of the pleated corner will be inserted into the slit behind.
The model will now be 3-D.
43
ついている
折り筋と
フチのところで
ずらすように段折り
Crimp using the creases.
44
フチの
ところで手前の
すき間に折る
Fold along the edge to inside.
45
手前の1枚を
ついている
折り筋で折る
平らにはならない
Fold the layer along the crease.
46
●の部分を
後ろから
押し出し
ながらカドを
後ろへ折る
Push the dotted point out and fold the corner up.
47
28-33と
同じように折る
Repeat 28-33 on the other side.
28-33
48
フチを
内側に
引き寄せる
ように折る
Swivel inside along the crease.
49
36-38と
同じように折る
Repeat 36-38 on the other side.
36-38
50
全体の形を整える
Shape the model.
51
耳のカドをひろげる
Open the layers.
フチを押し込んで
顔を立体的にする
Push and shape the face.
52
できあがり
Completed.


[傘(伝承作品)]
[Umbrella(Traditional)]
[傘・内側]
[Interior]
1
正方基本形に
折りたたむ
Assemble
to the square
base.
2
内側をひろげて
つぶすように折る
残りも同じように折る
Open and squash.
Repeat on the
other layers.
3
内側をひろげて
つぶすように折る
Open and squash.
4
反対側へ折る
Fold the flap
to the other side.
5
残りも同じ
ように折る
Repeat 3-4 on
the other layers.
6
3mmくらい
縦に切り込みを
入れる
Cut vertically
for 3mm.
フチから5mmの
ところで切り落とす
Cut the paper at
5mm above the
edge.
7
半分のところで
切り込みをいれる
Cut and make
slits as shown.
8
の部分を
全てかぶせる
Reverse the
darkened area.
The crease lines
should also
be reversed.
9
一度ひろげて図のように
折り筋をつけ直すとよい
Step 8 should be done
with this crease pattern.
It is easier if you unfold
the paper and refold as
shown.
10
かるくひろげる
Open lightly.
11
[傘・内側] できあがり
[Interior] Completed.
[傘・頭] [傘・内側]の3からはじめる
[Head] Start from step 3 of [Interior].
1
手前の1枚を
それぞれ
反対側へ折る
Fold the right
corner to the left.
Repeat behind.
2
中わり折り
Inside reverse fold.
3
4
ひろげるように折る
Open the flaps.
5
[傘・頭] できあがり
[Head] Completed.
[傘・外側] [傘・内側]の6からはじめる
[Exterior] Start from step 6 of [Interior].
1
フチの
ところで
切り落とす
Cut along
the edge.
2
穴をあける
make a hole.
頂点のところに
穴をあけて
かるくひろげる
Make a hole on top
And open lightly.
3
[傘・外側] できあがり
[Exterior] Completed.

[組み立て方]
[Assemble]



1

黒く塗った竹串
Black painted bamboo skewer.

[内側]と[外側]をのりづけ
中心に柄になる竹串を通して
[頭]と[外側]とのりづけ
Attach and paste the [Interior] and [Exterior].
Stick the bamboo skewer through the center of the umbrella and glue the [head] on the tip of it.

2

3

内側から見て谷折りの
折り筋の外側2mmくらいの
ところに切り込みを入れる
Cut at the corners with mountain fold (from outside) crease lines.

4

フチのところで
折ってのりづけ
Fold inside along the edge and paste.

5

残りも同じように折る
Repeat on the other parts.

6

7

8

約1cm
About 1cm.

[骨]になる細長い紙を
巻きつけてのりづけ
Wrap a narrow paper around it and glue.

9

10

手のカドを巻きつける
ように折ってのりづけ
自立は難しいので
台を用意するとよい
Wrap the hands around the handle of the umbrella and glue it on.
It is hard to make the model stand by itself.
Use a stand to help.

11

[傘持ち]できあがり
[Umbrella Bearer] Completed.

紙と仕上げについて For Finer Completion of the Models

最後まで折れるようになったら、質感や厚みの違う紙を探して挑戦してみましょう。作品に適した紙質や厚みは、仕上がりの大きさやその人それぞれの折りの個性によって異なってきます。自分や作品に合った紙を探して取り組むのも、折り紙の楽しみ方の1つです。

仕上げの練習にはホイル紙(おりがみの金や銀など)も使いやすい紙の1つです。折った形が決まるので、複雑で厚みの出る作品に向いています。また先を細く折る形や、立体的な形を作るのにも適しています。

折り図で解説している工程の後に、仕上げ・アレンジを加えて作品は完成します。写真や完成図を参考に、使う紙に合った仕上げを工夫してみてください。

折り上がった作品は、そのまま放置しておくと、作品自身の重みや紙の反発などで形がくずれてくることがあります。作品を長期間飾ったり保存したい場合は、糊づけしたり、針金を入れるなどをして形を保つ工夫が必要です。

Once you are sure you can complete folding a model, try paper with different quality and/or thickness. Every folder has his/her own best paper, so you also have to find one. This is another aspect of paper folding, and you will enjoy this.

For practice, using foil sheets is a good idea. The foil allows for fine folding, so it fits complex models. The foil also allows for making round and/or opened figures.

The pictures in this book are only examples of the final models. You can arrange the models as you like.

The model will eventually get out of shape, due to the strength and thickness of the paper. If you want to display your model long and retain its shape, use glue, wire or any other tools to strengthen it.

紙のお店 Paper Shop

作品に合った紙を使うことで、より魅力を引き出すことができます。大きな文具店や画材店、和紙専門店などで探してみましょう。ここではその一部を紹介します。

The model can be much more attractive using an appropriate sheet of paper. You can look for them at stationery and/or paper shops. The famous shops will be introduced in what follows:

◆株式会社竹尾 Takeo, Co.◆
洋紙販売を行っている会社。通信販売も行っている。
Only sells western paper. They do have the web shop.
見本帖本店 The Takeo-Mihoncho Shop
東京都千代田区神田錦町3-18-3
3-18-3 Kanda-Nishiki-cho, Chiyoda-ku, Tokyo, Japan
TEL:03-3292-3631
URL:http://www.takeo.co.jp/

◆小津和紙博物舗 Ozu Washi Hakubutsuho◆
老舗の和紙専門店。通信販売も行っている。
An old and famous washi paper shop. They do sell on the web, too.
東京都中央区日本橋本町3-6-2
3-6-2 Nihonbashi-Hon-cho, Chuo-ku, Tokyo, Japan
TEL:03-3662-1184
URL:https://www.ozuwashi.net/

◆紙処　紙友館ますたけ The Paper Shop Masutake◆
静岡にある和紙専門店。千代紙や和紙小物の扱いも豊富。
A washi shop in Shizuoka. They also have rich inventories of chiyo-gami sheets and goods made of washi.
静岡県静岡市葵区呉服町1-3-6
1-3-6 Gofuku-cho, Aoi-ku, Shizuoka-shi, Shizuoka, Japan
TEL:054-254-4541
URL:http://masutake.com/

◆紙の温度 Kami no Ondo◆
名古屋市にある紙の専門店。通信販売も行っている。
A paper shop in Nagoya. Also sells online.
愛知県名古屋市熱田区神宮2-11-26
2-11-26 Jingu, Atsuta-ku, Nagoya-shi, Aichi, Japan
TEL:052-671-2110
URL:https://www.kaminoondo.co.jp/

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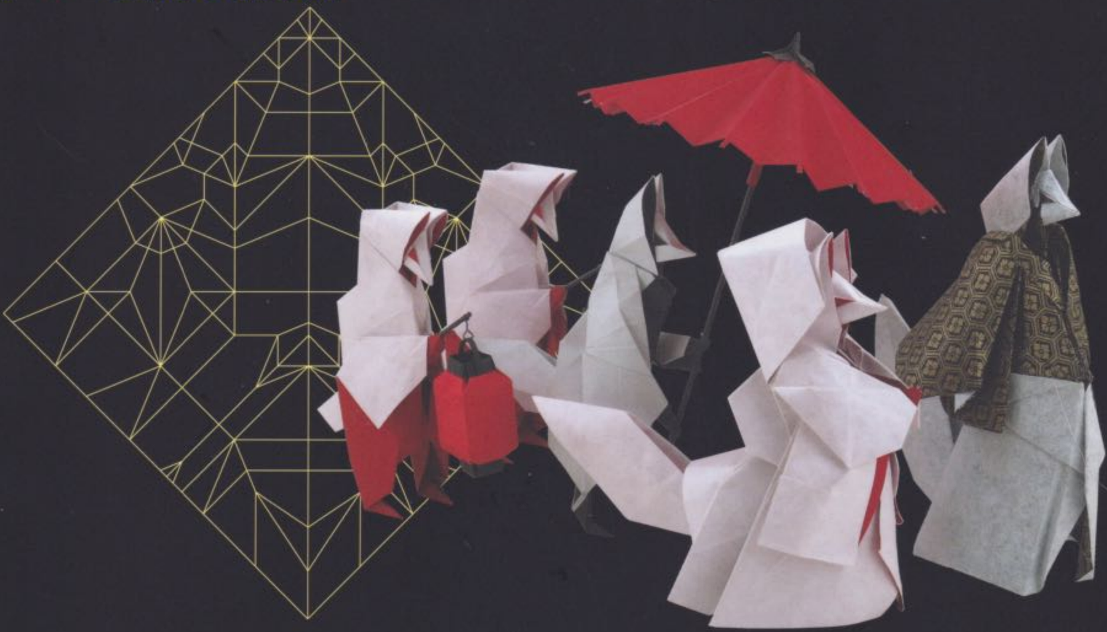
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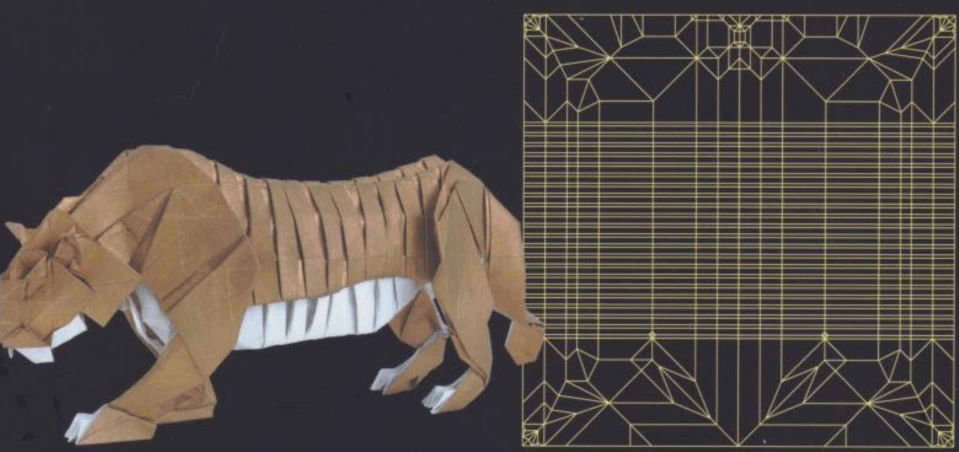


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